Croco Pid KES96-9675+7 PVWP 89

Croco Road Site Shawnee County, Kansas

EPA Identification Number KSD984967547

Preliminary Assessment and Scanning Site Investigation



Kansas Department of Health and Environment Bureau of Environmental Remediation Pre-Remedial Section

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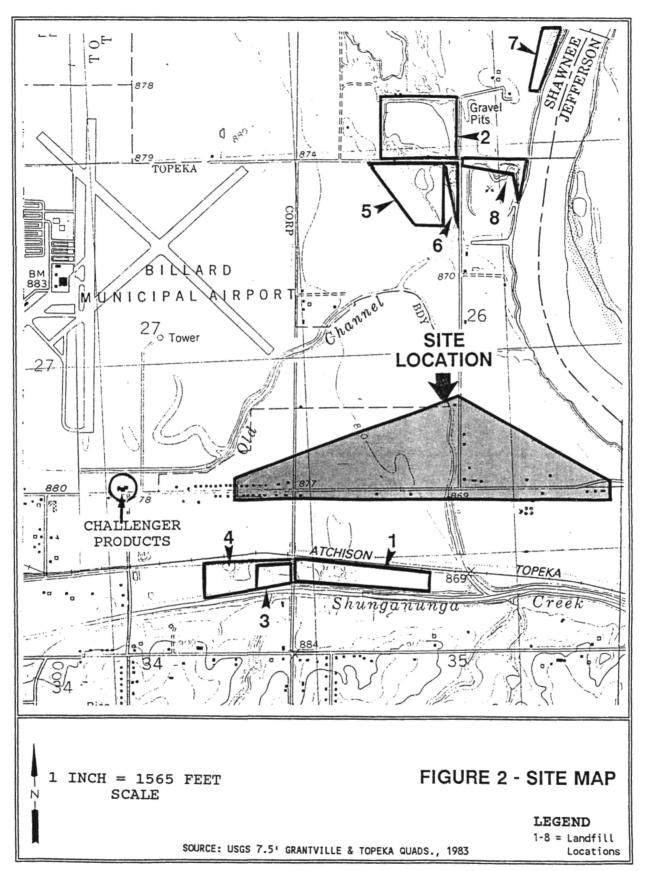
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1.0 INTRODUCTION

The Kansas Department of Health and Environment (KDHE) has entered into a cooperative agreement with the Environmental Protection Agency (EPA) under which KDHE will perform investigations of selected contaminated sites in Kansas. The investigations are conducted in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), collectively known as "Superfund". The purpose of the investigations is to determine if sites qualify for listing on the National Priority List (NPL), thus making them eligible for federally mandated cleanups.

As part of the agreement, KDHE conducted a Preliminary Assessment (PA) and Scanning Site Investigation (SSI) of the Croco Road Site located near Topeka, Kansas. The investigation was initiated after volatile organic chemicals (VOCs) were detected in several private wells. The KDHE has advised residents not to drink the water and the City of Topeka has provided an alternate source of water.

The investigation included background research regarding the site history and a reconnaissance of the site. The site reconnaissance was conducted during August 10-16, 1989 and on October 25, 1989. It consisted of interviewing local residents and owners of businesses in the vicinity of the site and collecting groundwater, surface water, and soil samples. The information obtained from the background research and site reconnaissance is documented in this report.



Landf	Table 1 Fill Property Owners
Landfill Number on Figure 1	Owner
1 2 3 4 5 6 7 8	Lee and Ruth Sweet Albert Jackson Ronald Frye E.J. and Gwendolyn Ables Donald and Norma Crump Albert Jackson Alberta Ferguson Dallas Barnes

Source: Shawnee County property records and interviews with KDHE personnel.

2.3 Site History

In January 1987, the KDHE received a complaint from a resident in the vicinity of the site. The resident indicated that water from his well had a foul taste and odor. In response to the complaint the KDHE collected a sample from the well and analyzed it for VOCs. The KDHE also collected samples from several nearby private wells. Sample locations are shown in Figure 3.

The tests indicated that several private wells were contaminated with VOCs (Table 2). The primary VOCs detected were trichloroethylene and tetrachloroethylene. The levels detected in some private wells exceeded the current safe drinking water standards. The levels detected ranged from 0.6 ug/l to 31.6 ug/l.

In December, 1985 the KDHE issued the final draft of "Program Strategy Addressing Volatile Organic Chemicals (VOCs) in Kansas Groundwater". This document outlined, among other items, the maximum contaminant levels for VOCs in public water supply wells and the guidelines for enforcing these levels. The Kansas Action Level (KAL) is the maximum contaminant level set by the KDHE for public water supplies. All public water supplies in the state of Kansas are required to meet the KAL standards set by the KDHE. Public water supplies not meeting the KAL standards are required to notify their customers of the contamination and upon review by the KDHE, may be required to discontinue the use of the water source, blend water with other non-contaminated sources, treat the contaminated water, and/or supply an alternate source of water. In addition, the KALs are used as a guideline to advise private well owners on safe drinking water standards.

The term ug/l is an abbreviation for micrograms per liter or parts per billion. Detecting 1.0 ug/l of a chemical in a water sample is approximately equivalent to detecting one drop of the chemical in 12,500 gallons of water.

2.0 BACKGROUND INFORMATION

2.1 Site Location

The Croco Road Site, EPA Identification Number KSD984967547, is located northeast of Topeka, Kansas in Shawnee County (Figure 1). The site is situated between the Phillip Billard Airport and the Kansas River. The airport is located on the northwest edge of the site and the Kansas River is less than 1/4 mile east. The legal description is the SW1/4 SE1/4 of Section 26, Township 11 South, Range 16 East and the SE1/4 SE1/4 SE1/4 of Section 27, Township 11 South, Range 16 East. Geographic coordinates are 39° 04' 22" North latitude and 95° 36' 39" West longitude.

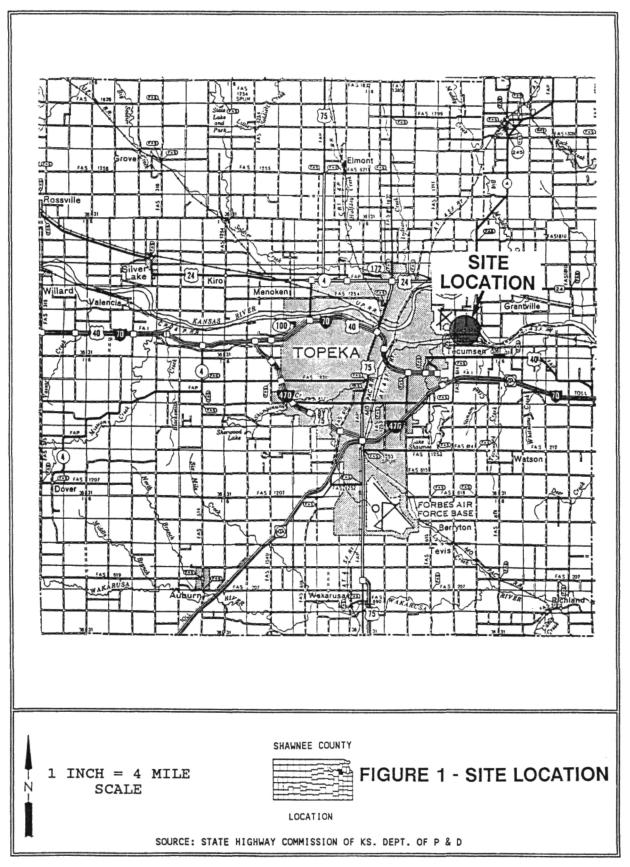
2.2 <u>Site Description</u>

The site covers approximately 147.5 acres and includes all areas where VOCs have been detected in the groundwater (Figure 2). The site is located in the Kansas River valley which is characteristically a broad low lying area with little slope.

Land within the site is zoned for single family residential or light and heavy industrial uses. Several landfills are located near the site (Figure 2). Of the eight landfills identified in Figure 2, six have been or are currently permitted by the state of Kansas to accept construction and/or demolition debris. Table 1 lists the owners of the landfills identified in Figure 2. (Topeka-Shawnee County Metro Planning, 1989).

In addition to the landfills in the area, there is a chemical repackaging company located approximately one-half mile west of the site known as Challenger Products, Incorporated (Figure 2). The facility purchases chemicals in bulk quantities and repacks them into smaller quantities for resale. Challenger also manufactures a biodegradable sewer and drain cleaner.

Other facilities in the vicinity of the site include the Phillip Billard Airport, situated northwest of the site, the Santa Fe Airport Industrial Park located directly south of the site, and the Santa Fe Industrial Park located approximately one mile west of the site. Billard airport supports several small airplane maintenance facilities (Figure 2).



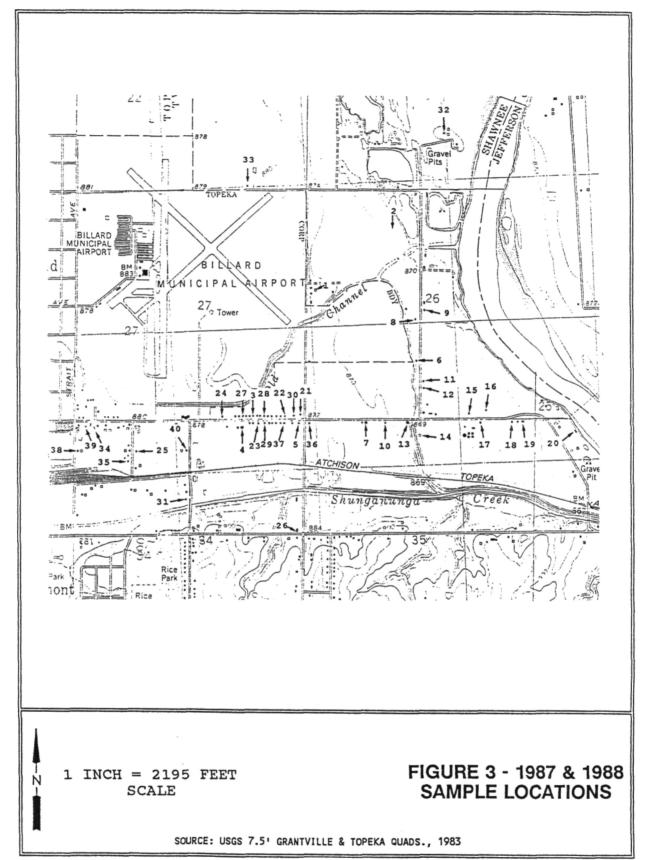


Table 2 Analytical Data - Croco Road Site									
WELL OWNER NAME	MAP ID	DATE SAMPLED	TCE 5.0*	DCE 70*	TCM 100*	PCE 7.0*	DCB 620*	TCA 200*	TOTAL VOCs
WAITE	10	SAIT BED	3.0	70	100	7.0.	020	200	VOC3
			(a:	ll mea	asurer	nents	are	in ug,	/1)
Taylor	1	02/18/87	ND	ND	ND	ND	ND	ND	ND
Crump	2	03/10/87	ND	ND	0.7	ND	ND	ND	0.7
Price	3	02/18/87	ND	ND	ND	ND	ND	ND	ND
D. Schmidtlein	4	03/05/87	ND	ND	ND	ND	ND	ND	ND
Gerhardt	5	03/10/87	ND	ND	ND	3.4	ND	ND	3.4
Guilbault	6	03/10/87	1.9	ND	ND	ND	ND	ND	1.9
B. Schmidtlein	7	02/18/87	10.3	0.7	ND	ND	ND	ND	11.0
Slavens	8	03/10/87	ND	ND	ND	ND	ND	ND	ND
Topeka Storage	9	03/10/87	ND	ND	ND	ND	ND	ND	ND
Dahlman	10	03/05/87	14.4	1.0	ND	ND	ND	ND	15.4
King	11	02/17/87	2.6	0.8	ND	ND	ND	ND	3.4
Lewis	12	02/17/87	31.6	0.7	ND	12.8	ND	ND	45.1
Thompson	13	02/19/87	12.9	0.8	ND	ND	ND	ND	13.7
Rush	14	03/04/87	2.1	ND	ND	ND	ND	ND	2.1
Osborn	15	02/17/87	4.2	ND	ND	ND	ND	ND	4.2
Knauber	16	02/17/87	ND	ND	ND	ND	ND	ND	ND
Rohrman	17	02/17/87	ND	ND	ND	ND	ND	ND	ND
Bush	18	02/19/87	ND	ND	ND	ND	ND	ND	ND
Griffith	19	02/18/87	ND	ND	7.3	ND	ND	ND	7.3
Jones	20	11/05/86	ND	ND	ND	ND	ND	ND	ND
Allen	21	04/22/87	ND	ND	ND	ND	ND	ND	ND
Ieanno	22	04/22/87	1.0	ND	ND	ND	ND	ND	1.0
Hunt	23	04/22/87	ND	ND	ND	ND	ND	ND	ND
Hapman	24	04/22/87	ND	ND	ND	ND	ND	ND	ND
Schafer	25	04/22/87	ND	ND	ND	ND	ND	ND	ND
Gartner	26	04/22/87	ND	ND	ND	ND	ND	ND	ND
Price	27	02/18/87	ND	ND	ND	ND	2.0	ND	2.0
Cole	28	04/22/87	0.6	ND	ND	ND	ND	ND	0.6
Sasbery	29	04/22/87	ND	ND	ND	2.0	ND	1.2	3.2
Gish	30		2.3	ND	ND	ND	ND	ND	2.3
	31	04/30/87							
Busey		05/04/87	ND	ND	ND	ND	ND	ND	ND
Lessman	32	05/07/87	ND	ND	ND	ND	ND	ND	ND
Meir	33	05/07/87	ND	ND	ND	ND	ND	ND	ND
Stansburg	34	05/15/87	ND	ND	ND	ND	ND	ND	ND
Echols	35	05/12/87	ND	ND	1.4	ND	ND	ND	1.4
Hennessey	36	05/22/87	0.8	ND	ND	1.2	ND	ND	2.0
Reiding	37	05/22/87	0.6	ND	ND	ND	ND	ND	0.6
Bauer	38	06/29/87	ND	ND	ND	ND	ND	ND	ND
J. Schmidtlein	39	02/18/87	ND	ND	ND	ND	ND	ND	ND
Bigger	40	02/18/87	ND	ND	ND	ND	7.4	ND	7.4

Trichloroethylene TCE

Cis and/or Trans 1,2 Dichloroethylene DCE

TCMTrichloromethane

PCE Tetrachloroethylene

1,2, and/or 1,4 Dichlorobenzene 1,1,1 Trichloroethane DCB

TCA

ND Not detected above the detection limit

Kansas Action Levels (KALs)

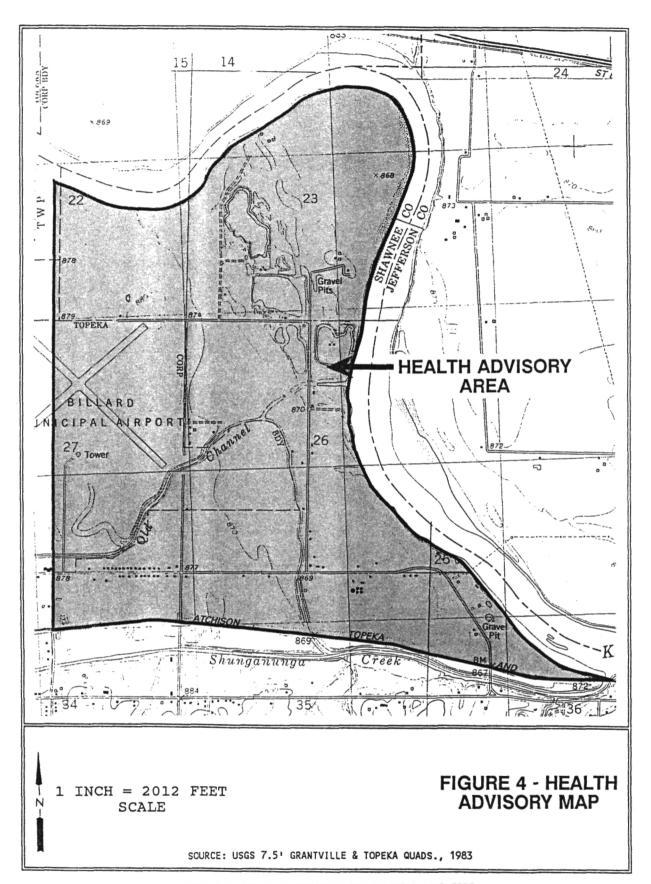
Initially, the KDHE recommended that private well owners whose wells were contaminated with VOCs not use the water and seek an alternate source of drinking and cooking water. However, on April 30, 1987 the KDHE issued a health advisory for all private well users in the vicinity of the site recommending that well water in the area not be used for human consumption. The advisory was issued for those residents in the area bordered by the Atchison, Topeka, and Santa Fe railroad on the south, the Kansas River on the north and east, and Rice Road on the west (Figure 4).

In February 1987, the KDHE initiated an investigation to determine potential sources for the contamination. In April 1987, several Resource Conservation and Recovery Act (RCRA) hazardous waste compliance inspections were conducted by the KDHE at facilities in the vicinity of the site. This included facilities located at the Phillip Billard Airport and Challenger Products, Incorporated.

The facilities located at the airport included Metropolitan Topeka Airport Authority (MTAA) maintenance shop, Topeka Police Helicopter maintenance shop, Hetrick Airplane Maintenance, Topeka Aircraft Sales and Service, and R & B The inspections revealed that all of these Aircraft. facilities generated waste Stoddard solvent and/or acetone in quantities ranging from one gallon to 10 gallons per month. Disposal of the wastes was generally by mixing with waste oil and/or evaporation.

The RCRA inspection conducted at Challenger Products revealed that the facility discharged all of its sewage and chemical waste to its septic tank. During the inspection, it was noted that there were numerous 55 gallon drums and 5 gallon containers of unknown contents stored behind the facility. The inspection report indicated that current chemical handling practices could lead to spillage. The facility operators were directed by the KDHE to discontinue disposing of chemicals in its septic system and to identify the contents of all drums and containers.

Due to the findings during the RCRA inspection conducted at Challenger Products, the KDHE tested waste samples from the facility's septic tank. The samples were collected on May 13, 1987 and September 1, 1987. The results are presented in Table 3.



KDHE SCANNING SITE INVESTIGATION OF CROCO ROAD SITE OCTOBER 1989

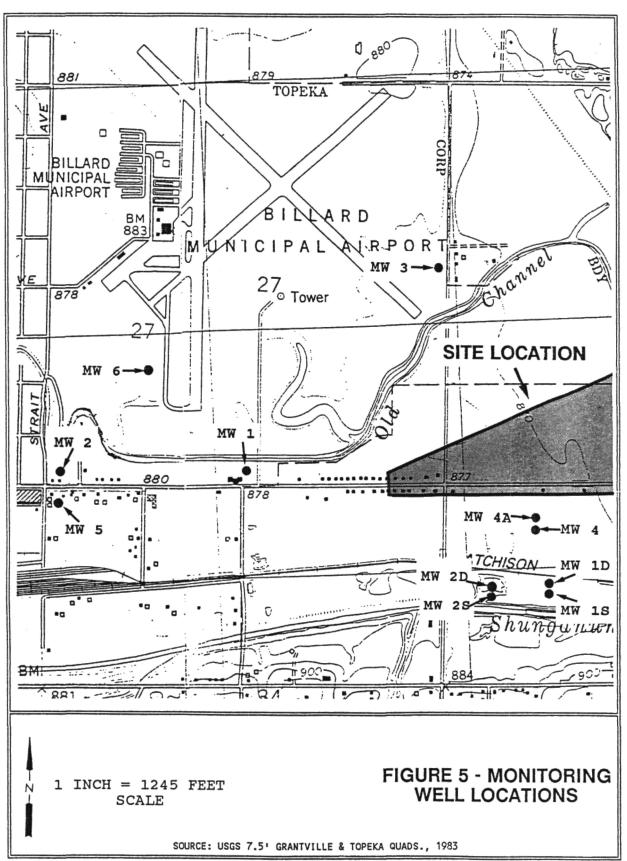
TABLE 3
Challenger Products, Inc.
Septic Tank Analytical Results

	<u>Da</u>	<u>te</u>
voc	05/13/87	09/01/87
	(ug	r/l)
Dichloromethane	ND	4,180.0
1,1-Dichloroethylene	ND	3.6
1,1-Dichloroethane	1.0	15.5
1,2-Dichloroethylene	0.5	14.4
Trichloromethane	17.5	9.8
Trichloroethylene	8.4	155.0
Benzene	ND	17.7
Tetrachloroethylene	492.0	2,875.0
Toluene	29.3	35.8
Chlorobenzene	1.9	383.0
Ethylbenzene	119.0	37.9
Meta-xylene	251.0	82.6
Ortho and/or Para-Xylene	202.0	67.7
1,2 &/or 1,4-Dichlorobenzene	ND	28.4

Due to the contamination detected in nearby private wells, an investigation of the Champney landfills also was conducted in 1987. The landfill currently being operated by Mr. Champney (Landfill Number 1 on Figure 2) and the landfill formerly owned and operated by Mr. Champney (Landfill Number 3 on Figure 2) are located approximately one quarter of a mile south of the site. Both landfills have been permitted to accept demolition debris (Kansas Solid Waste Disposal Permit Numbers 176 and 350).

On March 6, 1987, the KDHE directed Mr. Champney to conduct a groundwater monitoring program in areas covered by Permit Numbers 176 and 350. In April and May 1988, Mr. Champney installed four monitoring wells at the landfill (Figure 5). Two of the wells were drilled and completed in the unconsolidated zone (Well Identification Numbers: MW 1S and MW 2S) and two were completed at bedrock (Well Identification Numbers: MW 1D and MW 2D). VOC analyses indicated that MW 1D contained 0.7 ug/l of benzene. VOCs were not detected in any other monitoring wells installed on Mr. Champney's property.

On April 23, 1987, the KDHE investigated a report of illegal



KDHE SCANNING SITE INVESTIGATION OF CROCO ROAD SITE OCTOBER 1989

disposal of oil at the Champney landfill. The investigation revealed that Mr. Champney had authorized the disposal into the landfill of 4,000 gallons of an oil and water mixture from Capital City Oil Company. The KDHE directed Mr. Champney to recover the oil and remove all contaminated soils. In addition, the KDHE sampled and tested the oil and soils. The results revealed low levels of hydrocarbons; however, the levels were not high enough to classify the waste as hazardous. Based on the analyses, Mr. Champney was given authorization to dispose of the contaminated soils at the Shawnee County landfill. As a result of the illegal disposal, Mr. Champney was fined \$250.00.

The KDHE has also installed seven monitoring wells in the investigation area (Figure 5). Monitoring wells MW 1, MW 2, MW 3, MW 5, and MW 6 were all completed at bedrock. Monitoring wells MW 4 and MW 4A were completed in the shallow unconsolidated zone. VOC analyses indicated low levels of VOCs in some of the monitoring wells (Table 4).

Based on the data collected from the 1987-1988 investigation, the KDHE recommended that a Superfund investigation be conducted. The remainder of this report summarizes the results of that investigation.

TABLE 4
1987-1988 Monitoring Well Analytical Data
(all measurements are in ug/l)

Well Number	Date Sampled	DCM	тнм	TOLUENE	M-XYLENE	BENZENE	TCE	1,2 DCA	1,2 DCB	TOTAL VOCS
			_		(all meas	surements	are .	in ug/l)		
MW1	08/11/87	1.1	5.7	0.8	1.1	ND	ND	ND	ND	8.7
MWl	08/18/87	ND	ND	ND	0.8	ND	ND	ND	ND	0.8
MW1S	06/02/88	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWlD	06/02/88	ND	ND	ND	ND	0.7	ND	ND	ND	0.7
MW2	08/11/87	1.4	79.6	ND	ND	ND	ND	ND	ND	81.0
MW2	08/18/87	ND	39.9	0.6	ИD	ND	ND	ND	ND	40.5
MW2S	06/02/88	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW2D	06/02/88	ND	ND	ND	ND	ND	ND	ND	ND	ND
EWM.	08/18/87	ND	64.8	0.6	0.7	ND	ND	ND	ND	66.1
MW4	01/20/88	ND	ND	0.9	ND _	ND	0.8	ND	ND	1.7
MW4A	01/20/88	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW5	08/02/88	ND	ND	ND	ND	ND	ND	0.8	2.3	3.1
MW6	08/02/88	ND	ND	1.5	ND	ND	ND	ND	ND	1.5

DCM - Dichloromethane
THM - Trihalomethanes
M-XYLENE - Meta-Xylene

TCE - Trichloroethylene
1,2 DCA - 1,2-Dichloroethane
1,2 DCB - 1,2-Dichlorobenzene

1,2 DCB - 1,2-Dichlorobenzene
ND - Not detected above detection limit

3.0 HAZARDOUS SUBSTANCES CHARACTERISTICS

The hazardous substances detected at this site are classified as volatile organic chemicals or VOCs. Toxicological studies have indicated that long term exposure to excessive levels of some VOCs may cause cancer and other health problems.

Seven VOCs have been detected in the groundwater. The primary contaminants detected are trichloroethylene and tetrachloroethylene. Listed in Table 5 are all VOCs detected at the site. A brief description of each constituent is provided below.

TABLE 5 Summary of VOCs Detected	
1	ommon eviation
Trichloroethylene Tetrachloroethylene Trans and/or Cis 1,2-Dichloroethylene Trichloromethane 1,2-Dichloroethane	TCE PCE 1,2 DCE 1,2 DCA
1,1,1-Trichloroethane 1,2 and/or 1,4-Dichlorobenzene	1,1,1 TCA DCB

3.1 Trichloroethylene

Trichloroethylene (TCE), CAS #79-01-6, is a nonflammable, low viscosity liquid that is slightly soluble in water. It is heavier than water and will naturally migrate towards the bottom of an aquifer. When exposed to air or sunlight it readily volatizes and degrades. It binds easily with soils and therefore will move slowly through the subsurface until it reaches groundwater, where it is more mobile.

TCE may be a degradation product of tetrachloroethylene and is commonly used as a solvent for fats, waxes, resins, oils, rubber, paints, and varnishes. It is also used for degreasing, and in the manufacture of organic chemicals and pharmaceuticals. The KAL for TCE is 5.0 ug/l.

3.2 <u>Tetrachloroethylene</u>

Tetrachloroethylene (PCE), CAS #127-18-4, also known as perchloroethylene and Perc, is a nonflammable solvent. It is heavier than water, volatizes readily in the air, and can be degraded by both microbial activity and sunlight. Since it is heavier than water, PCE has a tendency to migrate downward through the soil and groundwater. It binds easily with soils and therefore the migration period can extend from years to decades depending upon the soil and subsurface properties.

The degradation of PCE in the groundwater may form other VOCs; however, this process is generally slow. Degradation products include trichloroethylene, dichloroethylene, and vinyl chloride. Tetrachloroethylene is commonly used as a dry cleaning solvent; a vapor-degreasing solvent; and as a drying agent for metals and other solids. The KAL for PCE is 7.0 ug/l.

3.3 Trans and/or Cis 1,2-Dichloroethylene

Trans and/or cis 1,2-dichloroethylene (1,2 DCE), CAS #156-60-5, is a flammable solvent which is slightly soluble in water. It also is slightly heavier than water and decomposes slowly when exposed to air, light, and moisture.

1,2 DCE may be a degradation product of PCE and is commonly used as a general solvent for organic materials, dye extractions, perfumes, lacquers, and organic synthesis. The KAL for 1,2 DCE is 70 ug/l.

3.4 Trichloromethane

Trichloromethane, CAS #67663, also known as chloroform, is a nonflammable solvent that is heavier than water. Trichloromethane can be formed from the degradation of tetrachloromethane. It is one of a group of VOCs known as trihalomethanes. Trihalomethanes are the most commonly found VOCs in public drinking water supplies. They are often formed during the chlorination of drinking water supplies.

Trichloromethane also is widely used by the lacquer industry. Among other commercially produced items, it is used in the manufacture of pharmaceuticals, floor polishes, and fluorocarbons. The KAL for trichloromethane and total trihalomethanes is 100.0 ug/l.

3.5 <u>1,2-Dichloroethane</u>

1,2-Dichloroethane (1,2 DCA), CAS #107-06-2, also known as ethylene dichloride, is a common solvent which is slightly soluble in water, is heavier than water, and is resistant to oxidation.

1,2 DCA is used as a lead scavenger in gasoline; an agent in the manufacture of organic chemicals; a paint remover; and a constituent of varnish and finish removers, grain fumigants and metal degreasers. It was commonly used as a constituent in grain fumigants; however, due to its toxicity, its use in this manner was banned on December 31, 1985 by the EPA. The KAL for 1,2 DCA is 5.0 ug/l.

3.6 1,1,1-Trichloroethane

1,1,1-Trichloroethane (1,1,1 TCA), CAS #71-55-6, also known as methyl chloroform, is a nonflammable solvent. It is used as a degreaser, a dry-cleaning agent, and a propellant. In addition, it is widely used as a substitute for carbon tetrachloride, which was banned by the EPA in 1985. The KAL for 1,1,1 TCA is 200 ug/l.

3.7 <u>1,2 and/or 1,4-Dichlorobenzene</u>

1,2 and/or 1,4-Dichlorobenzene (DCB), CAS #95-50-1 and #106-46-7, are solvents which are commonly used as intermediates in the formation of dyestuffs, herbicides, degreasers, and as air deodorants and insecticides. The KAL for 1,2-dichlorobenzene is 620 ug/l and for 1,4-dichlorobenzene it is 75 ug/l.

4.0 PHYSICAL AND DEMOGRAPHIC CHARACTERISTICS

4.1 <u>Target Population</u>

For Superfund scoring purposes the target population includes: (1) those persons using the groundwater for either drinking water or irrigation within a four mile radius of the site, and (2) the number of persons using surface water for either drinking water supply or irrigation within 15 miles downstream of the site.

The target population totals approximately 9,489 people (Table 6). Drinking water supplies account for 6,718 of the target population and irrigation accounts for 2,771.

There are no permitted surface water diversions within 15 miles downstream; therefore, no target population is attributed to surface water use.

TABLE 6 Target Population							
<u>Source - Groundwater</u>	Approximate Number of Persons Served						
Drinking Water Supplies Private Wells (Rural) Shawnee Co. RWD #3 Jefferson Co. RWD #1 Jefferson Co. RWD #15	76 3,583 2,782 277						
Irrigation Acres Irrigated	1,847						
TOTAL TARGET POPULATI	ON 9,489						

Sources: Kansas Water Database, Jefferson County RWDs #1 and #15, Shawnee Co. RWD #3, and USGS Topo Map, Topeka, Ks Quad..

4.2 Climate

Shawnee County has a typical continental climate with warm to hot summers and cold winters. At Topeka, temperatures range from 25° F below zero to 114° F and average about 54.1° F. Generally, the average daily maximum temperature is 90.1° F, occurring in July; the minimum daily temperature is 19.2° F, occurring in January.

The average yearly rainfall is 33.83 inches with 19.07 inches being the yearly minimum and 48.60 inches the maximum. The Gulf of Mexico is the principal source of moisture for the midcontinent region (Soil Conservation Service, 1970).

4.3 Land Use

Although much of Shawnee County is dedicated to farming it includes Topeka, the state capitol, which is the third largest city in Kansas. Topeka also supports numerous major industries.

The site is located in the Kansas River Valley. Major land use in the vicinity of the site includes agriculture, residential, and light industry. The Phillip Billard Airport, located northwest of the site, supports several small aircraft maintenance facilities. In addition, the area has numerous permitted and unpermitted construction/demolition landfills.

4.4 Topography and Drainage

The northern part of Shawnee County is in the Dissected Till Plains section, and the southern part is in the Osage Plains section of the Central Lowlands physiographic province. The major topographic features are the east trending valleys of the Kansas and Wakarusa Rivers. North of the Kansas River, in the glaciated part of the county, the topography is more subdued than that south of the river (Soil Conservation Service, 1970).

The site is located on the floodplain of the Kansas River. Shunganunga Creek is located south of the site and drains east into the Kansas River. The site, slopes slightly to the east-northeast toward the Kansas River.

4.5 <u>Soils</u>

Soils found in the vicinity of the site are generally of the Eudora-Muir association (Soils Conservation Service, 1970). These soils are characteristically well drained, have a loam

to silty clay loam subsoil, and are typically located on benches in the Kansas River valley (Soil Conservation Service, 1970).

Soils within the site boundary are predominantly of the Eudora Series (Figure 6). They are typically neutral to moderately alkaline, are well drained, and are formed in coarse silt loam or loam alluvium. These soils cover approximately 6.2 percent of Shawnee county and are typically located along the benches of the Kansas River (Soil Conservation Service, 1970).

4.6 Surface Water

Major surface water routes in the vicinity of the site include the Kansas River and Shunganunga Creek (Figure 7). The Kansas River is one of the largest flowing rivers in Kansas. It is located north and east of the site and flows in a southerly and easterly direction. The river provides drinking water to the cities of Topeka, Lawrence, and Kansas City. Shunganunga Creek, located south of the site, is a tributary of the Kansas River. It flows east into the Kansas River.

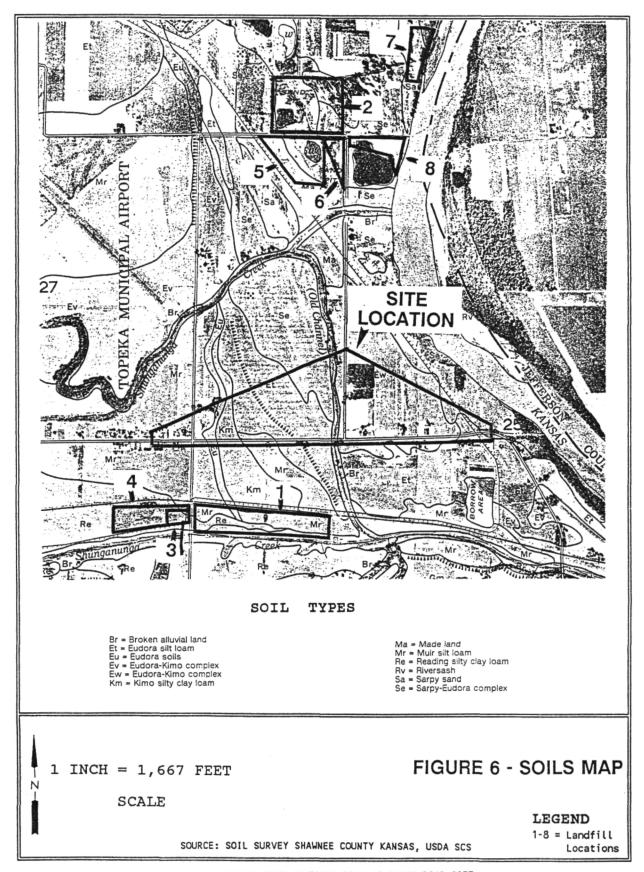
No above ground wastes were found at the site, therefore there is no known potential for overland migration into surface water. However, surface water and groundwater are closely interdependent at the site, and contaminant transfer between the groundwater and surface water is possible.

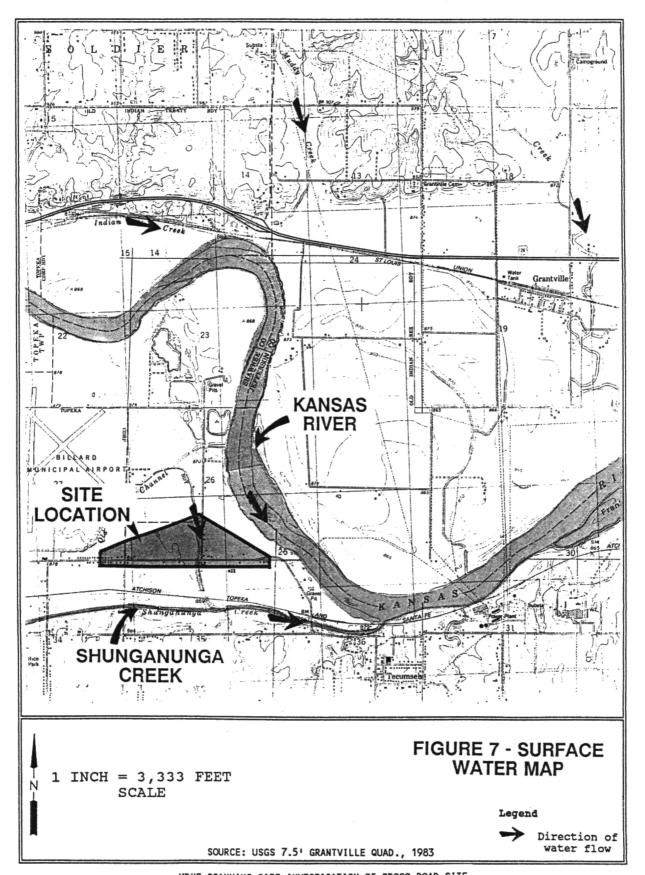
4.7 Geology and Hydrogeology

The geology of the site primarily consists of Kansas River valley alluvium and terrace deposits (Figure 8). Bedrock is predominantly shale ranging in age from Pennsylvanian to Permian.

The principal water bearing unit is the alluvium deposits which consist of sand and gravel. These deposits are a good source of water and are generally coarser towards the bottom of the unit. The terrace deposits are known as the Newman terrace deposits and are similar to the alluvial deposits in that they also consist of sand and gravel. The alluvial deposits typically occur from the river to the first terrace and the Newman terrace deposits typically occur along the terraces (Fader, 1974). Groundwater depth is approximately 20 feet and saturated thickness ranges from more than 40 feet west and north of the site, to 20 to 40 feet within the site boundaries (Fader, 1974).

Lithologic logs of monitoring wells in the vicinity of the site indicate that silty clay occurs from zero to





5.0 POTENTIAL SOURCES

No sources were identified, but the potential source areas include several industries, landfills, and residential septic systems. Some of the potential sources are described below.

5.1 Challenger Products, Inc.

Challenger Products, is located approximately one-half mile west of the site at 3500 Northeast Seward Road (Figure 9).

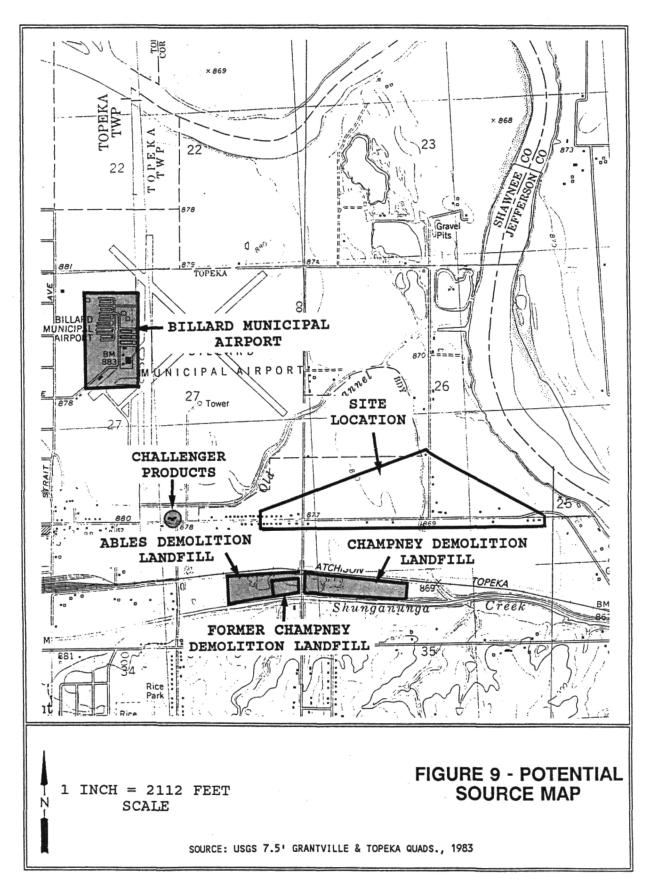
In May 1982, a RCRA inspection was conducted at the facility by the KDHE. The inspection revealed that Challenger manufactured a biodegradable sewer, drain, and septic tank cleaner. The facility did not generate hazardous waste, and was exempt from all regulations regarding hazardous waste.

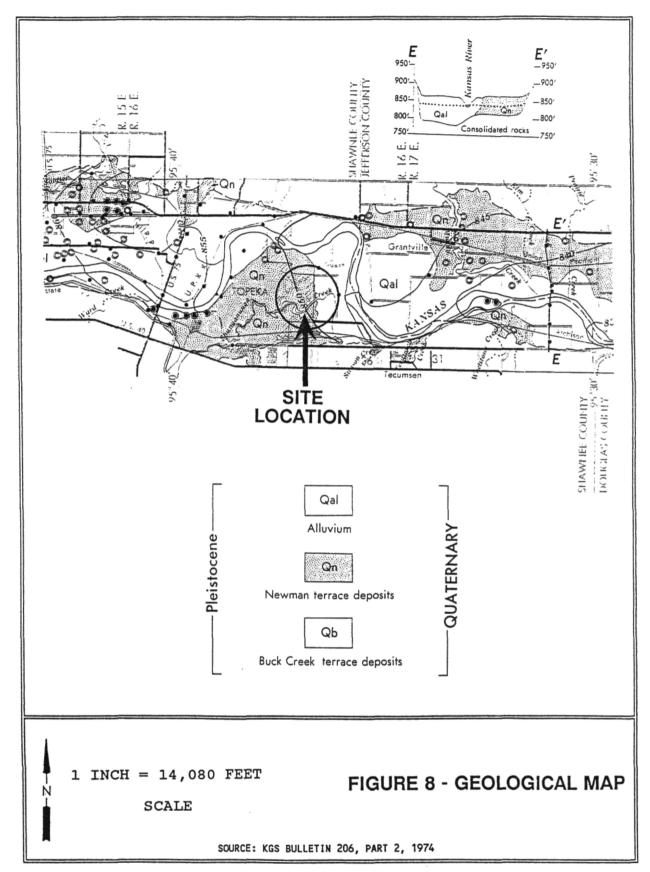
In April 1987, the KDHE conducted a RCRA inspection. inspection was initiated after contamination was detected in several private wells in the vicinity of Challenger. inspection revealed that Challenger still manufactured the biodegradable cleaner. In addition, Challenger also purchased chemicals in bulk quantities and repackaged them into smaller quantities for resale. The inspection report indicated that Challenger was discharging all sewage and laboratory wastes into its septic tank. The KDHE tested the contents of the tank and found numerous VOCs. tetrachloroethylene and trichloroethylene, which are the main VOCs detected in nearby private wells. The KDHE ordered the facility to discontinue this method of disposal.

In August 1987, the KDHE drilled a monitoring well east of the facility. The well was drilled to bedrock and tested for VOCs. The results revealed very low levels of toluene and meta-xylene. The well was resampled during the 1989 site reconnaissance and composite soil samples were collected near the septic tank and along the septic tank laterals. No VOCs were detected in either the soil samples or the monitoring well; however, the septic tank samples contained numerous VOCs, including trichloroethylene and tetrachloroethylene.

5.2 Ables Demolition Landfill

Located south of the site, this landfill was initially issued a permit to accept demolition debris on May 7, 1976 (Permit Number 172) (Figure 9). The permit expired on June 30, 1989. The property is owned and operated by E.J. and Gwendolyn Ables.





approximately 30 feet; fine to coarse sands from approximately 30 to 60 feet; gravel from approximately 60 to 65 feet; and bedrock consisting of shale and/or limestone at 65 to 70 feet. Bedrock slopes in a east-southeast direction (Fader, 1974); however, local groundwater flow is towards the river in an east-northeast direction.

5.3 Champney Demolition Landfills

George Champney has owned and operated two landfills located south of the site at 313 Croco Road and 314 Croco Road (Figure 9). Both sites were permitted for disposal of demolition debris. The "Former Champney Landfill" was initially permitted on May 7, 1976 (Permit Number 176). However this landfill has been officially closed and is currently used to store bricks. The demolition landfill currently being operated by Mr. Champney was initially permitted on October 26, 1979 (permit Number 350).

Mr. Ronald Frye owns the area identified as "Former Champney Demolition Landfill" on Figure 9. Mr. and Mrs. Lee and Ruth Sweet recently purchased the property currently being operated by Mr. Champney and identified as "Champney Demolition Landfill" on Figure 9.

Due to the contamination detected in nearby private wells, in 1987 the KDHE directed Mr. Champney to conduct a groundwater monitoring program. In 1988, Mr. Champney installed four monitoring wells on his property. Analyses of samples collected from the wells in 1988 and 1989 revealed no significant levels of VOCs.

5.4 Billard Airport

Numerous small maintenance facilities are located at Billard Airport (Figure 9). As discussed in the site history section of this report, all use or have used Stoddard Solvent and/or Acetone in the air processes. Businesses which are no longer located at the airport could also be considered potential sources.

5.5 Other Potential Sources

Although not depicted on Figure 9 all residents and businesses in the area use septic tanks for waste disposal. Hazardous substances discharged into septic tanks could adversely affect the groundwater as a result of septic tank leaks or discharge from lateral lines.

During the site reconnaissance, an interview was conducted with Mr. Art Hase, a retired Billard Airport maintenance operator. Mr. Hase indicated that a landfill was located at the southern end of the north-south runway at Billard Airport from approximately 1950 to 1970. This alleged landfill was used for the disposal of materials from facilities located at the airport (Hase, 1989).

6.0 FIELD ACTIVITIES AND ANALYTICAL RESULTS

6.1 Introduction

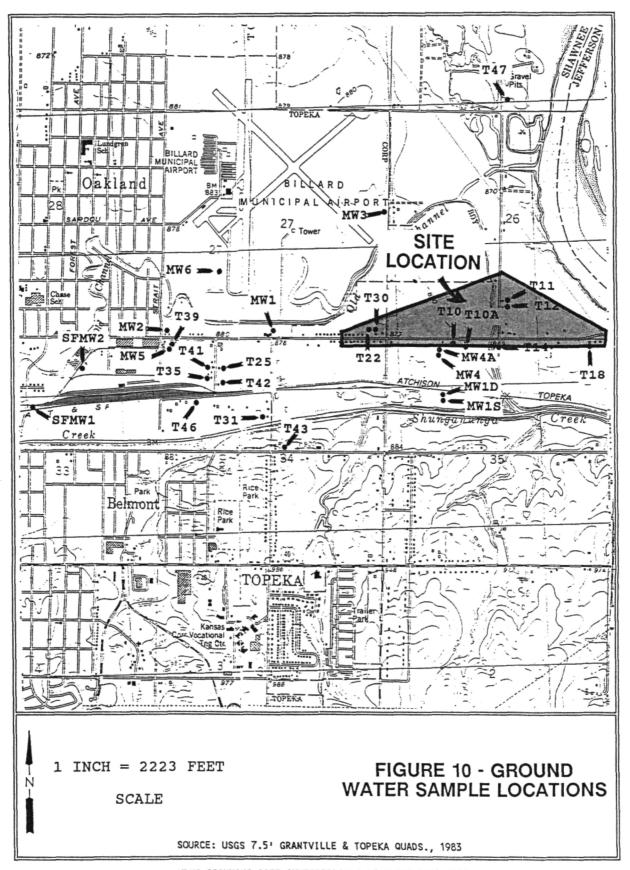
Field activities were conducted during August 10-16, 1989 and on October 25, 1989. Field activities included the collection of waste samples, soil samples, groundwater samples, surface water samples and tours of several businesses in the area. A total of 54 samples were collected during field activities (Table 7). Appendix 1 includes copies of all analytical data.

Summary of Sample and Analyzed for	TABLE 7 Summary of Samples Collected and Analyzed for VOCs During the 1989 Site Reconnaissance								
Sample Media	Total <u>Samples</u>								
Groundwater Surface water Soils Waste TOTAL	38 5 9 <u>2</u> 54								

6.2 Groundwater Samples

Groundwater samples were collected from twenty eight different locations in the vicinity of the site (Figure 10). Samples were collected from wells that are located both downgradient and upgradient of the site. Each of the samples were analyzed for VOCs. In addition, some of the samples were analyzed for base neutrals and acid extractables.

No significant levels of base neutral or acid extractables were detected; however, VOCs were detected in four of the thirty eight groundwater samples at levels ranging from 1.0 ug/l to 60.0 ug/l (Table 8). The levels of trichloroethylene and tetrachloroethylene detected in two of the wells (Figure 10 Identification Numbers: T11 and T12) exceeded Kansas drinking water standards.



Dimethyl disulfide, which was detected in the sample collected from location T43, is commonly found in water that has been contaminated with feedlot runoff or septic system leakage. The source for the acetone contamination is unknown; however, acetone is a common degreasing solvent. Although not listed in Table 8, several of the monitoring well samples showed low levels of methylene chloride. This type of contamination is laboratory commonly associated with contamination. Laboratories chloride to decontaminate use methylene equipment.

Table 8 1989 Groundwater Analytical Data Croco Road Site								
WELL OWNER NAME	MAP ID	DATE	TCE 5.0*	PCE 7.0*	ACETN None*	DMDS None*	TOTAL VOCs	
(all measurements are in ug								
D. Dahlman G. Dahlman J. King R. Lewis Wilson C. Bush B. Ieanno Shafer Linder H. Busey G. Echols B.Schmidtlein Chase Riner Crook Fisher Moore SFMW1 SFMW2 MW1 MW1S MW1D MW2 MW3	T10 T10A T11 T12 T14 T18 T25 T30 T31 T35 T39 T41 T42 T43 T46 T47 SFMW1 SFMW2 MW1S MW1D MW1S MW1D MW2 MW3	08/10/89 08/10/89 08/10/89 08/10/89 08/10/89 08/11/89 08/10/89 08/10/89 08/10/89 08/10/89 08/10/89 08/10/89 08/10/89 08/16/89 08/16/89 08/16/89 08/16/89 08/16/89 08/10/89 08/10/89 08/10/89 08/10/89 08/10/89 08/10/89 08/10/89	ND ND 13.0 24.0 ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND N	ND N	ND ND 14.0 32.0 ND ND ND ND ND ND ND ND ND ND ND ND ND	
MW4A MW5 MW6	MW4A MW4A MW5 MW6	08/09/89 08/09/89 08/10/89 08/09/89	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	

TCE - Trichloroethylene

PCE - Tetrachloroethylene

Kansas Action Levels (KALs)

ACETN - Acetone

DMDS - Disulfide Dimethyl

ND - Not detected above detection limit

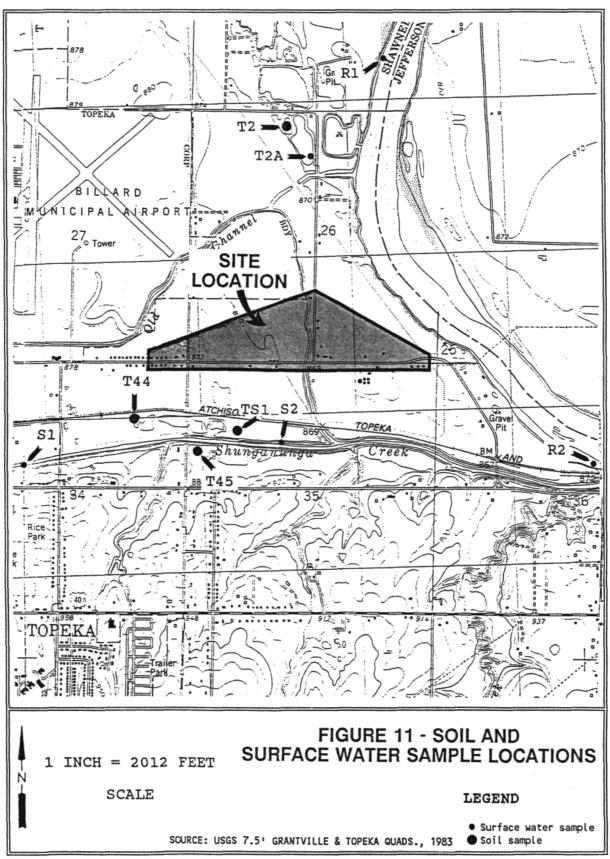
6.3 Soil Samples and Surface Water Samples

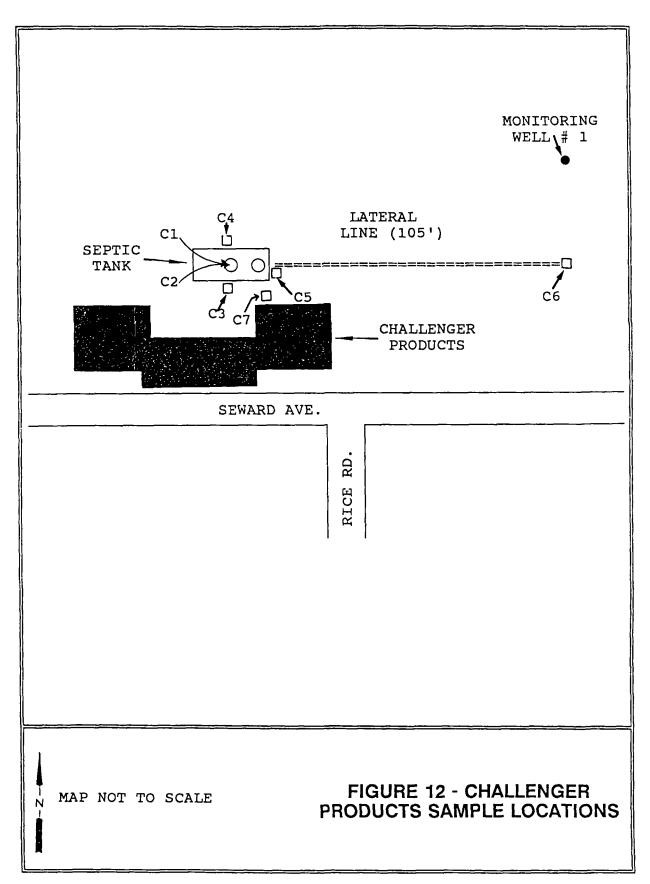
Soil samples were collected from four sample locations (Figure 11). In addition, five surface water samples were collected from the Kansas River, Shunganunga Creek, and a pond at a demolition landfill (Figure 11). Four of the surface water samples were collected both upstream and downstream of potential sources. All samples were analyzed for VOCs. No detectable levels of VOCs were indicated.

6.4 Challenger Products Soil and Waste Samples

Two waste samples were collected from the septic tank at Challenger Products and a total of five soil samples were collected near the septic tank, along the lateral lines of the septic tank and near a leaking drum (Figure 12). The soil samples indicated no VOC contamination. The septic tank samples were collected from the bottom and the top of the tank (Figure 12 Sample Identification Numbers: C1 and C2). Results of the analyses are listed in Table 9 and as indicated, both hydrocarbons and chlorinated solvents were detected in the samples collected from the septic tank.

Table 9 Challenger Products Waste Stream Analyses								
Sample Location: Septic Tank								
voc	Surface	Bottom						
	(u	g/l)						
Dichloromethane	9.1	ND						
1,1-Dichloroethane Trans &/or Cis -	0.8	ND						
1,2-Dichloroethylene	76.6	2,610.0						
Trichloromethane	10.1	ND						
Bromodichloromethane	1.5	ND						
Trichloroethylene	7.4	ND						
Benzene	38.4	ND						
Tetrachloroethylene	84.1	ND						
Toluene	5.2	26.2						
Chlorobenzene	7.1	144.0						
1,4-dichlorobenzene	ND	182.0						





7.0 SUMMARY

In January 1987, citizens in the vicinity of the site complained of foul taste and odors in their drinking water. The KDHE subsequently tested several private wells in the area and found VOCs in some of the private wells. The levels detected at some sample locations were above current safe drinking water standards. Consequently, the KDHE advised all well owners in the vicinity of the site to seek an alternate source of drinking water.

Due to the contamination detected, water lines from the city of Topeka were extended to include all residents within the site and most residents within the site vicinity. However, connection to the lines is not mandatory and residents are required to pay for the connections and to share the cost of the construction of the main line.

The KDHE initiated an investigation in January 1987 to determine the source(s) for the contamination. Part of the investigation included conducting several RCRA hazardous waste compliance inspections at several facilities in the vicinity. In addition, an investigation of the Champney landfill was conducted after the KDHE was informed that the landfill operators discharged oil into the landfill. Consequently, Mr. Champney was fined for unlawful disposal of oil and ordered to install monitoring wells. Although monitoring wells were installed at the landfill, no VOC levels above the drinking water standards have been detected. The RCRA inspections and landfill investigation did not indicate any obvious sources for the contamination.

In 1988, the KDHE drilled numerous monitoring wells both upgradient and downgradient of the site at shallow and deep depths. Results of sampling indicated no VOC levels above current drinking water standards and no obvious sources for the contamination.

During the 1989 site reconnaissance several private wells, all monitoring wells, and soils and wastes at a nearby facility were sampled and tested for VOCs. Analytical results of the private well samples were similar to the results obtained during the 1987 and 1988 investigation. The levels detected in two of the wells exceeded current safe drinking water standards.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results of groundwater samples collected from wells at the site indicate that the VOC contamination is limited to a relatively isolated area within the site boundaries. The levels detected in some samples exceed the current safe drinking water standards. Private well samples collected in 1987 show the contamination was more widespread than in 1989. These results may be influenced by several factors such as groundwater levels due to seasonal changes, less extensive use of the groundwater, dilution of the contaminants, and/or downward movement of the contaminants.

The majority of the residents located within the site are now connected to city water and may only use their wells for irrigation; therefore, there is less water being withdrawn from the aquifer. The major types of contaminants detected generally are heavier than water and in high concentrations tend to migrate or sink towards the bottom of the aquifer. If wells in the area are not continuously pumped, the contaminants may have migrated into the lower part of the aquifer.

Drilling logs are not available for all private wells. However, a survey of private well owners indicates that the majority of the wells are drilled to a depth of approximately 30 to 50 feet. The deepest private well is 80 feet. Monitoring wells drilled by the KDHE in the site vicinity indicate that bedrock ranges from 65 to 70 feet. The deepest private well has shown the highest levels of trichloroethylene and tetrachloroethylene. This may indicate that the well is located very near a source and/or the contaminants have migrated to bedrock.

Samples collected from monitoring wells drilled in the vicinity of the site did not reveal any obvious sources for the contamination. Several VOCs, including trichloroethylene and tetrachloroethylene, were detected in samples collected from the septic tank at Challenger Products, Incorporated. Although the VOCs of concern were detected in the septic tank, no VOCs were detected in either the soils near the septic tank or along the lateral lines. Deeper testing of the soils in this area may indicate differently. The monitoring well drilled on Challenger's property did not reveal any significant levels of VOCs; however, the well was drilled and screened at bedrock. If this area is a source for the contamination, the contamination may not have migrated to bedrock and therefore may remain at shallower depths.

Monitoring wells drilled at Champney landfill also did not reveal any VOCs. In addition, no VOCs were detected in soil samples collected on the landfill property. Although no

contamination has been detected at the landfill, it is possible that contamination may have moved offsite and is no longer detectable at the landfill.

All residents within the site boundary have been provided with the option of obtaining an alternate source of water. Based on analytical data from 1987, 1988, and 1989, the levels of contamination do not appear to be increasing. The past and present use of land in the area provides for numerous potential sources for the contamination and it is possible that there is more than one source for the contamination.

Although the preliminary and projected Hazardous Ranking System (HRS) scores for the Croco Road Site are above the minimum required for further investigation under the Superfund program, the level of the contamination detected does not present an imminent threat to the environment or to those individuals in the area because an alternate source of water has been provided and the levels detected appear to be decreasing. Based on this no further action under the Superfund program is warranted at this time.

Although the site had been recommended for No Further Action (NFA) under Superfund, the following recommendations should be implemented.

- 1) All of the monitoring wells and contaminated private wells should be sampled and tested yearly. If the levels show a significant increase then further investigation may be warranted.
- 2) Challenger Products, Incorporated should be reinspected for RCRA hazardous waste compliance. During past inspections, the KDHE recommended that the facility connect to the city sewer and to discontinue discharging hazardous substance into the septic tank. In addition, it was strongly recommended that they initiate proper chemical handling procedures. During the 1989 investigation, hazardous substances were detected in the septic tank and a deteriorated drum of unknown substance was found on the facility property. Stronger enforcement may be warranted.
- 3) The landfills in the area should be closely monitored to assure they are complying with all county and state regulations. In addition, all unpermitted landfills should be closed or proper permits obtained.
- 4) Conduct periodic RCRA hazardous waste compliance inspections of facilities located at Billard Airport.
- 5) The KDHE should recommend that all residents within the site connect to city water.

No ongoing sources for the contamination were found during the investigation; however, routine inspections at all facilities in the area will help alleviate potential ongoing sources.

9.0 PRELIMINARY ASSESSMENT AND SITE INSPECTION FORMS

EPA requires that a Preliminary Assessment Form and Site Inspection Report form be completed for all sites being considered for National Priority Listing (NPL). The completed forms are in Appendix 2. The information from these forms is used to determine if a site warrants further investigation under Superfund. A site is recommended for further investigation if, during the investigation, it is determined that contamination at the site presents an imminent danger to the health of those living near the site and/or the environment and/or if it meets the minimum scoring requirements using the Hazardous Ranking System (HRS).

The HRS is a national ranking system designed to evaluate the relative potential of uncontrolled hazardous waste site facilities to cause human health or safety problems or ecological or environmental damage. The HRS score and remedial recommendations are used to determine if a site warrants a federally mandated cleanup. The HRS score cannot be released to the public until final approval from EPA has been granted. For this site, a preliminary and projected HRS score were calculated.

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T2 Landfill
Betroont & Kircuit
EPA SAMPLE NO.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH310

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD

CAS NO.

•

COMPOUND

Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0708

Sample wt/vol: 5. (g/mL) G Lab File ID: C8453

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 25.
Date Analyzed: 8/25/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

74-87-3	Chloromethane	13.	U
	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	Ū
75-00-3	Chloroethane	13.	υ
75-09-2	Methylene Chloride	51.	В
67-64-1	Acetone	16.	В
75-15-0	Acetone Carbon Disulfide	7.	Ū
75-35-4	1,1-Dichloroethene	7.	บ
75-34-3	1,1-Dichloroethane	7.	U
540-59-0	1,2-Dichloroethene (total)	7.	U
	Chloroform	7.	שׁ
	1,2-Dichloroethane_	7.	Ū
78-93-3	2-Butanone		l u
71-55-6	2-Butanone	7.	ט
56-23-5	Carbon Tetrachloride	7.	Ū
108-05-4	Vinyl Acetate	13.	บ
75-27-4	Bromodichloromethane	7.	ΰ
	1,2-Dichloropropane	7.	บ
10061-01-5	cis-1,3-Dichloropropene	7.	Ū
	Trichloroethene	7.	υ
	Dibromochloromethane	7.	Ū
	1,1,2-Trichloroethane	7.	Ū
71-43-2	Benzene	7.	Ū
10061-02-6	trans-1,3-Dichloropropene	7.	บั
		7.	Ū
108-10-1	Bromoform 4-Methyl-2-Pentanone	13.	บ
591-78-6	2-Hexanone	13.	Ū
	Tetrachloroethene	7.	Ū
	1,1,2,2-Tetrachloroethane	7.	ט
	Toluene	7.	Ū
	Chlorobenzene	7.	บ
100-30-7	Ethylbenzene	7.	Ū
100-42-5	Styrene	7.	บั
	Xylene (total)	7.	Ū
T330-20-1	Waterie (cocal)	- ''	-

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

TZ Belmont & Kincald

GH310

_ab Name: RECMD

Lab Code: RECMD Case No.: 12580 SAS No.:

Contract: 68W80051

SDG No.: GH305

Matrix: (soil/water) SOIL

Lab Sample ID: AS0708

Sample wt/vol: 5. (g/mL) G

Lab File ID: C8453

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec. 25.

Date Analyzed: 8/25/89

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	UNKNOWN HYDROCARBON	17.54	7.	J
4 5				
7. <u>4</u>				
10				
12. 13. 14.				
16. 17.				
19.				
21. 22. 23.				
24. 25. 26.				
27. 28. 29.				
30				

GH334

Q

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0732

Sample wt/vol: 5. (g/mL) G Lab File ID: C8507

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 17. Date Analyzed: 8/26/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/Lior ug/Kg) UG/KG

74-87-3Chloromethane	12.	Ū
74-83-9Bromomethane	12.	Ü
75-01-4Vinyl Chloride	-\ \ \frac{12.}{12.}	ט
	_ 	_
75-00-3Chloroethane	12.	Ū
75-09-2Methylene Chloride	32.	В
67-64-1Acetone	12.	ט
	_ 6.	ט
75-35-41,1-Dichloroethene		U
75-34-31,1-Dichloroethane	_ 6.	ט
540-59-01,2-Dichloroethene (total)		ט
67-66-3Chloroform_	6.	ט
107-06-21,2-Dichloroethane	6.	ט
78-93-32-Butanone	12.	U
71-55-61,1,1-Trichloroethane	6.	ט
56-23-5Carbon Tetrachloride	6.	ប
108-05-4Vinyl Acetate	12.	U
75-27-4Bromodichloromethane	6.	ប
78-87-51,2-Dichloropropane	_\ 6.	U
10061-01-5cis-1,3-Dichloropropene	6.	บ
79-01-6Trichloroethene	6.	ַ ע
124-48-1Dibromochloromethane	6.	שו
79-00-51,1,2-Trichloroethane	6.	ប
71-43-2Benzene	6.	U
10061-02-6trans-1,3-Dichloropropene	6.	ប
75-25-2Bromoform	6.	ט
108-10-14-Methyl-2-Pentanone	12.	ប
591-78-62-Hexanone	12.	บ
127-18-4Tetrachloroethene	6.	ប
79-34-51,1,2,2-Tetrachloroethane	6.	ש
108-88-3Toluene	6.	lυ
108-90-7Chlorobenzene	- 6.	U
100-41-4Ethylbenzene	- 6.	บ
100-41-4	- 6.	บ
1330-20-7Xylene (total)	_1	tī

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

GH334

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.:

SDG No.: GH305

Matrix: (soil/water) SOIL

Lab Sample ID: AS0732

Sample wt/vol: 5. (g/mL) G

Lab File ID: C8507

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec. 17.

Date Analyzed: 8/26/89

Column: (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	Ethane, 1, 1, 2-trichloro-1, 2, 2 UNKNOWN HYDROCARBON	=======	6. 8.	J J J

TA Dump l landful belment & Kincaid EPA SAMPLE NO

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH313

Q

ab Name: RECMD Contract: 68W80051

Sab Code: RECMD

Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0711

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8257

Pevel: (lcw/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L-or ug/Kg) UG/L

74-87-3	Chloromethane	10.	U
	Bromomethane	10.	ט
75-01-4	Vinyl Chloride	10.	ט
75-00-3	Chloroethane	10.	שׁ
75-09-2	Chloroethane	5.	U
67-64-1	Acetone	10.	ט
75-15-0	Acetone Carbon Disulfide	5.	ט
75-35-4	1,1-Dichlorcethene	5.	U
75-34-3	1,1-Dichlorcethane	5.	ט
540-59-0	1,2-Dichlorcethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichlorcethane	5.	ט
78-93-3	2-Butanone 1,1,1-Trichloroethane	10.	ט
71~55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	ט
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromcdichloromethane	5.	ט
78-87-5	1,2-Dichloropropane	5.	טו
.0061-01-5	cis-1,3-Dichloropropene	5.	ט
79-01-6	Trichloroethene	5.	ט
124-48-1	Trichloroethene	5.	U
79-00-5	1,1,2-Trichloroethane	5.	שׁ
71-43-2	Benzene	5	υ
0061-02-6	trans-1,3-Dichloropropene	5.	שו
75-25-2	Bromoform	5.	ט
108-10-1	Bromoform	10.	ប
591-78-6	2-Hexanone	10.	ับ
127-18-4	Tetrachloroethene	5.	Ū
	1,1,2,2-Tetrachloroethane	5.	ט
108-88-3	Toluene	5.	ប
108-90-7	Chlorobenzene		ט
100-41-4	Ethylbenzene	5.	ט
100-42-5	Styrene	5.	U
1330-20-7	Styrene Xylene (total)	5.	Ū

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

	Dumpi	landfi	ıl
2A	EPA SA	MPLE	МО
	triamise	2 Kina	aid

GH313	
GH313	

ď	Name.	RECMD	Contract:	60W20051
للت	name:	RECMU	contract:	TCOOPMBO

Lab Code: RECMD Case No.: 12580 SAS No.:

SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0711

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8257

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Number TICs found: 0

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor:

1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	NO SIGNIFICANT PEAKS PRESENT	= ====== :		====
2				
3.				
4				
5				
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7.4				
8		_		
9		_		
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.5• _1		_		l ——
.6				l ——
.7		-		
.8		_		
9.				
20				
21		-		
22				
4		-		
24		_	. 	
26		-		
27.				
28				
29		_	,	
30	•			

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT Kansas Health & Environmental Laboratory Organic Chemistry Laboratory Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: LISA LARSEN

Address: FORBES BLDG. 740, TOPEKA, KS. 66620

Lab Number:

00050100

Report Date: 8-23-89

SAMPLE COLLECTION INFORMATION

Sample Identification Number: 00NESENW331116E

Sample Type:

WATER

Collected By: COOPER

Collection Site: 04089065/MW1 SANTA FE TOPEKA SN CO. Date: 8-21-89

Time: 1152

RESULTS OF ANALYSIS

	PURGABLE ORGANICS	Concentration (UG/L) NOT DETECTED NOT DETECTED NOT DETECTED	Detection Limit
		(UG/L)	(UG/L)
_	CHLOROMETHANE	NOT DETECTED	5.0
	BROMOMETHANE	NOT DETECTED	1.2
	VINYL CHLORIDE	NOT DETECTED	0.8
	CHLOROETHANE	NOT DETECTED	3.7
	DICHLOROMETHANE	NOT DETECTED	0.9
	1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
	1,1-DICHLOROETHANE	NOT DETECTED	0.5
	TRANS & OR CIS 1,2-DICHLOROETHYLENE	NOT DETECTED	0.5
	TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
	1,2-DICHLOROETHANE	NOT DETECTED	0.6
	1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
	TETRACHLOROMETHANE	NOT DETECTED	0.7
	CHLOROETHANE DICHLOROMETHANE 1,1-DICHLOROETHYLENE 1,1-DICHLOROETHANE TRANS &/OR CIS 1,2-DICHLOROETHYLENE TRICHLOROMETHANE (THM) 1,2-DICHLOROETHANE 1,1,1-TRICHLOROETHANE TETRACHLOROMETHANE BROMODICHLOROMETHANE (THM) 1,2-DICHLOROPROPANE TRANS 1,3-DICHLOROPROPENE TRICHLOROETHYLENE BENZENE DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.5
_	1,2-DICHLOROPROPANE	NOT DETECTED NOT DETECTED NOT DETECTED	0.5
	TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
	TRICHLOROETHYLENE	NOT DETECTED	0.6
	BENZENE	NOT DETECTED	0.5
	DIBROMOCHLOROMETHANE (THM)	NOT DETECTED NOT DETECTED NOT DETECTED	0.7
	CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
	1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
	BROMOFORM (THM)	NOT DETECTED	1.5
	1,1,2,2-TETRACHLOROETHANE	NOT DETECTED NOT DETECTED	0.6
	DIBROMOCHLOROMETHANE (THM) CIS 1,3-DICHLOROPROPENE 1,1,2-TRICHLOROETHANE BROMOFORM (THM) 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHYLENE TOLUENE CHLOROBENZENE ETHYLBENZENE	NOT DETECTED NOT DETECTED	1.1
	TOLUENE	NOT DETECTED	0.5
	CHLOROBENZENE	NOT DETECTED	0.5
	ETHYLBENZENE	NOT DETECTED	0.7
	META-XYLENE	NOT DETECTED	0.6
	ORTHO & OR PARA-XYLENE	NOT DETECTED	0.6
	1,3-DICHLOROBENZENE	NOT DETECTED	1.0
	1,2-DICHLOROBENZENE	NOT DETECTED	1.0
	1,4-DICHLOROBENZENE	NOT DETECTED	1.0

Analyst: RICHARD L. PIERCE

Roger H. Carlson, Ph.D., Director

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AUG 29 1989

BUREAU OF ENVIRONMENTAL REMEDIATION

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT Kansas Health & Environmental Laboratory Organic Chemistry Laboratory

Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: LISA LARSEN

Address: FORBES BLDG. 740, TOPEKA, KS. 66620 Lab Number:

0005000C

Report Date: 8-22-89

SAMPLE COLLECTION INFORMATION

Sample Identification Number: 00SENWNE331116E

Sample Type: WATER

Collection Site: 04089065/MW2 ARMCO TOPEKA SN CO. Collected By: COOPER

Date: 8-21-89

1100 Time:

RESULTS OF ANALYSIS

PURGABLE ORGANICS	Concentration (UG/L) NOT DETECTED NOT DETECTED NOT DETECTED	Detection Limit
	(UG/L)	(UG/L)
CHLOROMETHANE	NOT DETECTED	`5.Ô
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
TRANS & /OR CIS 1,2-DICHLOROETHYLENE	NOT DETECTED	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANÈ	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
CHLOROMETHANE BROMOMETHANE VINYL CHLORIDE CHLOROETHANE DICHLOROMETHANE 1,1-DICHLOROETHYLENE 1,1-DICHLOROETHANE TRANS &/OR CIS 1,2-DICHLOROETHYLENE TRICHLOROMETHANE (THM) 1,2-DICHLOROETHANE 1,1,1-TRICHLOROETHANE 1,1,1-TRICHLOROETHANE TETRACHLOROMETHANE BROMODICHLOROMETHANE (THM) 1,2-DICHLOROPROPANE TRANS 1,3-DICHLOROPROPENE TRICHLOROETHYLENE BENZENE DIEROMOCCHIOROMETHANE (THM)	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
BENZENE	NOT DETECTED	0.5
DIBROMCCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TRANS 1,3-DICHLOROPROPENE TRICHLOROETHYLENE BENZENE DIBROMCCHLOROMETHANE (THM) CIS 1,3-DICHLOROPROPENE 1,1,2-TRICHLOROETHANE BROMOFORM (THM) 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHYLENE TOLUENE CHLOROBENZENE ETHYLBENZENE META-XYLENE ORTHO &/OR PARA-XYLENE	NOT DETECTED	1.1
TOLUENE	NOT DETECTED .	0.5
CHLOROBENZENE	NOT DETECTED ·	0.5
ETHYLBENZENE	NOT DETECTED	0.7
META-XYLENE	NOT DETECTED	0.6
ORTHO &/OR PARA-XYLENE	NOT DETECTED	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0

Analyst: RICHARD L. PIERCE

Roger H. Carlson, Ph.D., Director

RECEIVED

AUG 2 9 1989

BUREAU U. ENVIRONMENTAL REMEDIATION

GH330

Lab File ID: C8361

Contract: 68W80051 Lab Name: RECMD

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0728

Sample wt/vol: 5. (g/mL) ML

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Dilution Factor: Column: (pack/cap) PACK 1.00

> CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/L

74-87-3	Chloromethane	10.	ŭ
74-83-9	Bromomethane	10.	ប
75-01-4	Vinyi Chioride (10.	שו
75-00-3	Chloroethane	10.	บ
75-09-2	Chloroethane	11.	В
		10.	ט
75-15-0	Carbon Disulfide	5.	ט
75-35-4	1,1-Dichloroethene	5.	טו
75-34-3	1,1-Dichloroethane	5.	ប
540-59-0	1,2-Dichloroethene (total)	5.	ט
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	ט
78-93-3	2-Butanone	10.	บ
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinvl Acetate	10.	U
75-27-4	Vinyl AcetateBromodichloromethane	5.	u
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1.3-Dichloropropene	5.	ט
79-01-6	Trichloroethene	5.	ט
124-48-1	Dibromochloromethane	5.	ט
79-00-5	1,1,2-Trichloroethane	5.	ט
71-43-2	Benzene	5.	ט
	trans-1,3-Dichloropropene	5.	ט
75-25-2	Bromoform	5.	ט
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	ט
	Tetrachloroethene	5.	ט
	1,1,2,2-Tetrachloroethane	5.	U
	Toluene	5.	U
	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	ט
100-42-5	Styrene		U
	Xylene (total)	5.	Ū

4045 NE Seward EPA SAMPLE NO.

GH336

Lab Name: RECMD Contract: 68W80051

Case No.: 12580 SAS No.: SDG No.: GH319 Lab Code: RECMD

Matrix: (soil/water) WATER

Lab Sample ID: AW0734

Sample wt/vol:

5. (g/mL) ML

Lab File ID: A8306

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/24/89

Column: (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	10.	Ū
	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	ט
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
	Carbon Disulfide_	5.	U
75-35-4	1,1-Dichloroethene	5.	ט
75-34-3	1,1-Dichloroethane	5.	ט
540-59-0	1,2-Dichloroethene (total)	5.	ט
	Chloroform	5.	ט
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	ט
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	lσ
75-27-4	Bromodichloromethane	5.	ט
78-87-5	1,2-Dichloropropane	5.	ט
0061-01-5	cis-1,3-Dichloropropene	5.	lυ
79-01-6	Trichloroethene	4.	J
	Dibromochloromethane	5.	U
	1,1,2-Trichloroethane	5.	U
	Benzene	5.	U
0061-02-6	trans-1,3-Dichloropropene	5.	บ
	Bromoform	5.	U
	4-Methyl-2-Pentanone	10.	ט
	2-Hexanone	10.	ט
127-18-4	Tetrachloroethene	5.	ט
79-34-5	1,1,2,2-Tetrachloroethane	5.	ט
108-88-3		5.	טן
	Chlorobenzene	5.	ប
	Ethylbenzene	5.	ប
	Styrene	5.	Ū
	Xylene (total)	5.	Ū

GH316

Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD

Case No.: 12580 SAS No.: . SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0714

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8304

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/24/89

Column: (pack/cap) PACK

Dilution Factor:

1.00

Q

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

العائد الماليني

74-87-3				
74-83-9Bromomethane 10. U 75-01-4Vinyl Chloride 10. U 75-00-3Chloroethane 10. U 75-09-2Methylene Chloride 2. BJ 67-64-1Acetone 10. U 75-15-0Carbon Disulfide 5. U 75-35-41,1-Dichloroethene 5. U 75-34-31,2-Dichloroethane 5. U 540-59-01,2-Dichloroethane 5. U 107-06-21,2-Dichloroethane 5. U 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethane 5. U 79-02-61,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6	وعبد ١١٠٠٠	ט	10.	74-87-3Chloromethane
75-01-4	ialuc	Ū l	1	
75-00-3Chloroethane 75-09-2Methylene Chloride 67-64-1Acetone 75-15-0Carbon Disulfide 75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethene 75-34-31,2-Dichloroethene 10. U 75-35-41,1-Dichloroethene 75-34-31,2-Dichloroethene 75-01,2-Dichloroethene 10. U 75-34-31,2-Dichloroethene 11. J 67-66-3		U	1	
75-09-2Methylene Chloride 2. BJ 67-64-1Acetone 10. U 75-15-0Carbon Disulfide 5. U 75-35-41,1-Dichloroethene 5. U 540-59-01,2-Dichloroethene (total) 1. J 67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 5. U 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethane 5. U 79-00-51,1,2-Trichloroethane 5. U 79-00-51,1,2-Trichloroethane 5. U 75-25-2Benzene 5. U 75-25-2	DEDAG	י די לי	1 " 1	
67-64-1	matrico d	ej l	1	75-09-2Methylene Chloride
75-15-0Carbon Disulfide 75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethane 5. U 540-59-01,2-Dichloroethene (total) 67-66-3Chloroform 10. U 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 5. U 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10. U 75-27-4Bromcdichloromethane 79-01-6	7.57	Ū	1	
75-35-41,1-Dichloroethene 5. U 75-34-31,1-Dichloroethane 5. U 540-59-01,2-Dichloroethene (total) 1. J 67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 5. U 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 1061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 13. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6		ט	5.	75-15-0Carbon Disulfide
75-34-31,1-Dichloroethane 5. U 540-59-01,2-Dichloroethene (total) 1. J 67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 5. U 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromcdichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropane 5. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6Bromoform 5. U		ט	5.	
540-59-01, 2-Dichloroethene (total) 1. J 67-66-3Chloroform 5. U 107-06-21, 2-Dichloroethane 5. U 78-93-32-Butanone 10. U 71-55-61, 1, 1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51, 2-Dichloropropane 5. U 10061-01-5cis-1, 3-Dichloropropene 5. U 79-01-6Trichloroethene 13. 124-48-1Dibromochloromethane 5. U 79-00-51, 1, 2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6Bromoform 5. U		ט	5.	
67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 5. U 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromcdichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U		J	1	
107-06-21, 2-Dichloroethane 5. U 78-93-32-Butanone 10. U 71-55-61, 1, 1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromcdichloromethane 5. U 78-87-51, 2-Dichloropropane 5. U 10061-01-5cis-1, 3-Dichloropropene 5. U 79-01-6Trichloroethane 13. U 79-00-51, 1, 2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6Bromoform 5. U		ט	5.	
78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromcdichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 13. I 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U		U	5.	
56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 13. I 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U		ט	10.	
56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 13. I 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U		ט	5.	71-55-61,1,1-Trichloroethane
75-27-4		U	5.	
75-27-4Bromcdichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 13. 124-48-1Dibromcchloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U		U	10.	108-05-4Vinyl Acetate
10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 13. 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U		ט	5.	
79-01-6Trichloroethene 13. 124-48-1Dibromochloromethane 5. 79-00-51,1,2-Trichloroethane 5. 71-43-2Benzene 5. 10061-02-6trans-1,3-Dichloropropene 5. 75-25-2Bromoform 5.		U	5.	78-87-51,2-Dichloropropane
124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U	,	ט [5.	L0061-01-5cis-1,3-Dichloropropene
79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U		1	13.	79-01-6Trichloroethene
71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U		ַן ע	5.	124-48-1Dibromochloromethane
10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U		U (5.	79-00-51,1,2-Trichloroethane
75-25-2Bromoform 5. U				71-43-2Benzene
, o so s			5.	10061-02-6trans-1,3-Dichloropropene
108-10-14-Methyl-2-Pentanone 10. U			5.	
	•			108-10-14-Methyl-2-Pentanone
591-78-62-Hexanone10. U		ช	10.	591-78-62-Hexanone
127-18-4Tetrachloroethene 1. J			1.	
79-34-51,1,2,2-Tetrachloroethane 5. U				79-34-51,1,2,2-Tetrachloroethane
108-88-3Toluene 5. U		-		
108-90-7Chlorobenzene 5. U			- i	108-90-7Chlorobenzene
100-41-4Ethylbenzene5. U		_	-	100-41-4Ethylbenzene
100-42-5Styrene 5. U		· 1	- l	
1330-20-7Xylene (total) 5. U		ן ע	5.	1330-20-7Xylene (total)

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

111			
537	NE.	Kinc	iid
	SAM		

GH316	
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Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD

Case No.: 12580 SAS No.:

SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0714

Sample wt/vol:

5. (g/mL) ML

Lab File ID: A8304

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/24/89

Column: (pack/cap) PACK

Dilution Factor:

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	NO SIGNIFICANT PEAKS PRESENT	========	<u> </u>	=====
2		<u> </u>		
3.				
4.				
5				
0.				
7.4				
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29.		_		
30				

T12

520 NE Kincaid EPA SAMPLE NO.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH337

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

Matrix: (soil/water) WATER Lab Sample ID: AW0735

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8354

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

			7
74-87-3	Chloromethane	10.	ับ
74-83-9	Bromomethane	10.	שׁ
75-01-4	Vinyl Chloride	10.	ט
	Chloroethane	10.	ט
75-09-2	Methylene Chloride	12.	В
67-64-1	Acetone	10.	ן ט
	Carbon Disulfide	5.	ַ
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	ี บ
540-59-0	1,2-Dichloroethene (total)	5.	ប
	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	บ
78-93-3	2-Butanone	10.	ע
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromcdichloromethane	5.	U
	1,2-Dichloropropane	5.	שׁ
10061-01-5	cis-1,3-Dichloropropene	5.	שׁ
79-01-6	Trichloroethene	24.	
124-48-1	Dibromochloromethane	5.	บ
79-00-5	1,1,2-Trichloroethane	5.	ט
	Benzene	5.	ט
10061-02-6	trans-1,3-Dichloropropene	5.	ับ
	Bromoform	5.	ט
108-10-1	4-Methyl-2-Pentanone	10.	ט
591-78-6	2-Hexanone	10.	ប
127-18-4	Tetrachloroethene	8.	
79-34-5	1,1,2,2-Tetrachloroethane	·5.	U
108-88-3	Toluene	5.	บ
108-90-7	Chlorobenzene	5.	ַ
	Ethylbenzene	5.	υ
1	Styrene	5.	U
	Xylene (total)	5.	ប

EPA SAMPLE NO.

GH309

Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD

Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0707

Sample wt/vol:

5. (g/mL) ML

Lab File ID: A8255

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor:

1.00

CONCENTRATION UNITS: COMPOUND

CAS NO.

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND (ug/L or	ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	ט
	Bromomethane	10.	ט
	Vinyl Chloride	10.	ט
	Chloroethane	10.	ט
	Methylene Chloride	<u>5.</u>	U
	Acetone	21.	
75-15-0	Carbon Disulfide	5.	ប
75-35-4	1,1-Dichloroethene	<u> </u>	ט
	1,1-Dichloroethane	5.	ប
540-59-0	1,2-Dichloroethene (total)		ប
	Chloroform	5.	ש
	1,2-Dichloroethane	5.	ט
	2-Butanone	10.	lu
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	\ 5.	Ū
108-05-4	Vinyl Acetate	10.	Ū
	Bromodichloromethane	I	บ้
	1,2-Dichloropropane	5.	บ
	cis-1,3-Dichloropropene		Ū
	Trichloroethene	5.	Ū
	Dibromochloromethane	<u> </u>	Ū
	1,1,2-Trichloroethane		Ū
	Benzene	5.	Ū
	trans-1,3-Dichloropropene		Ū
	Bromoform	5.	υ
	4-Methyl-2-Pentanone		Ū
	2-Hexanone	10.	บี
	Tetrachloroethene		ט
	1,1,2,2-Tetrachloroethane		บี
	Toluene	5.	ט
	Chlorobenzene		ט
			บ
100-41-4	Ethylbenzene		Ü
100-42-5	Styrene Xylene (total)	5.	ט
1330-20-7	xyreue (totar)	5.	ال

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

T43 PPÄ SAMPLE NO.

GH309	
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Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD

Case No.: 12580 SAS No.:

SDG No.: GH298

●Matrix: (soil/water) WATER

Lab Sample ID: AW0707

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8255

Level: (low/med) LOW

Date Received: 8/13/89

% Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor:

1.00

Number TICs found: 2

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 624-92-0 2 3. 4.	Disulfide, dimethyl (9CI)UNKNOWN	14.80	60.	J
6				
11.4				
13 14 15				
18.				
22				
25. 26. 27.				
29. 30.				

FORM I VOA-TIC

1/87 Rev.

EPA SAMPLE NO.

GH319

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER

Lab Sample ID: AW0717

Sample wt/vol: 5. (g/mL) ML

Lab File ID: C8355

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Level: (low/med) LOW

Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO.	COMFOUND	(ug/L or ug/		Q
74-87-3	Chloromethane		10.	U
	Bromomethane		10.	U
	Vinyl Chloride	·	10.	שׁ
	Chloroethane		10.	U
	Methylene $Chloring$	ride	9.	В
67-64-1	Acetone		10.	ַ
75-15-0	Carbon Disulfi	.de	5.	U
75-35-4	1,1-Dichlorcet	hene	5.	ט
75-34-3	1,1-Dichlorcet	hane	5.	U
	1,2-Dichloroet		5.	U
67-66-3	Chloroform		5.	U
107-06-2	Chloroform 1,2-Dichlorcet	hane	5.	Ū
70 07 7	2-Butanono		10.	U
71-55-6	1,1,1-Trichlo	coethane	5.	ַ ד
56-23-5	Carbon Tetrach	nloride	5.	ប
	Vinyl Acetate		10.	ַ ע
	Bromodichloro	methane	5.	U
78-87-5	1,2-Dichlorop	ropane	5.	U
	cis-1,3-Dichlo		5.	ប
79-01-6	Trichloroether	ne -	5.	ט
124-48-1	Dibromochlorom	nethane	5.	ן ט
	1,1,2-Trichlo		5.	U
	Benzene		5.	[ט
	trans-1,3-Dic	hloropropene	5.	שׁן
			5.	ט
108-10-1	Bromoiorm 4-Methyl-2-Pe	ntanone	10.	υ
	2-Hexanone		10.	ט
	Tetrachloroet		5.	U
	1,1,2,2-Tetra		5.	Ųΰ
	Toluene		5.	ט
108-90-7	Chlorobenzene		5.	ט
100-41-4	Ethylbenzene_		5.	U
	Styrene		5.	ט
1330-20-7	Xylene (total	<u> </u>	5.	שׁ

GH335

Contract: 68W80051 Lab Name: RECMD

Lab Code: RECMD Case No.: 12580 SAS No.:

SDG No.: GH319

Matrix: (soil/water) WATER

Lab Sample ID: AW0733

Sample wt/vol:

Lab File ID: A8264

5. (g/mL) ML

Date Received: 8/18/89

Level: (low/med) LOW % Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor:

1.00

CAS NO.

COMPOUND

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

74-87-3	Chloromethane	10.	ש
	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	שׁוֹ
75-00-3	Chloroethane	10.	ឋ
75-09-2	Methylene Chloride	5.	ט
	Acetone	10.	[U
	Carbon Disulfide	5.	ប
75-35-4	1,1-Dichloroethene	5.	טן
75-34-3	1,1-Dichloroethane	5.	שׁ
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	ט
56-23-5	Carbon Tetrachloride	5.	ַ
108-05-4	Vinyl Acetate	10.	∖ฃ
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
0061-01-5	cis-1,3-Dichloropropene	5.	U
	Trichloroethene	5.	ប
	Dibromochloromethane	5.	ַט
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	u
0061-02-6	trans-1,3-Dichloropropene	5.	שׁ
	Bromoform	5.	שׁן
108-10-1	4-Methyl-2-Pentanone	10.	U
	2-Hexanone	10.	U
	Tetrachloroethene	5.	ַ
79-34-5	1,1,2,2-Tetrachloroethane	5.	ַ
	Toluene	5.	ט
108-90-7	Chlorobenzene	5.	שׁ
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	שׁן
	Xylene (total)	5.	טן

EPA SAMPLE NO.

GH325

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0723

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8356

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	10.	ប
74-83-9	Bromcmethane	10.	ט
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	ן ט
75-09-2	Chloroethane Methylene Chloride	13.	В
67-64-1	Acetone Carbon Disulfide	10.	ַ
75-15-0	Carbon Disulfide	5.	ן ט
75-35-4	1,1-Dichloroethene	5.	ע
75-34-3	1.1-Dichloroethane	5.	ַ ט
540-59-0	1,2-Dichlorcethene (total)_	5.	U
67-66-3	Chloroform	5.	υ
107-06-2	Chloroform 1,2-Dichloroethane	5.	U
78-93-3	2-Butanone 1,1,1-Trichloroethane	10.	Ū
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	J. 5.	U
108-05-4	Vinyl Acetate	10.	ט
75-27-4	Vinyl Acetate	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cls-1.3-Dichloroprobene	1 5.	U
79-01-6	Trichloroethene	l 5.	lσ
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
77 40 0	Pongano		U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	Bromoform 4-Methyl-2-Pentanone	10.	ט
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	ט
79-34-5	1,1,2,2-Tetrachloroethane	5.	Ū
108-88-3	Toluene	5.	שׁ
108-90-7	Chlorobenzene		บ
100-41-4	Ethylbenzene	5.	Ū
100-42-5	Styrene	5.	U
1330-20-7	Styrene Xylene (total)	5.	υ
1330 20 1	113 10110 (00001)	1	"

EPA SAMPLE NO.

GH318

Contract: 68W80051 Lab Name: RECMD

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0716

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8261

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND

(ug/L or ug/Kg) UG/L

Q

74-87-3	Chloromethane	10.	ט
74-83-9	Bromomethane	10.	ען
75-01-4	Vinyl Chloride	10.	טן
75-00-3	Chloroethane	10.	บ
75-09-2	Chloroethane Methylene Chloride	5.	ับ
	9 1	10.	บ
75-15-0	Carbon Disulfide	5.	ับ
75-35-4	1,1-Dichloroethene	5.	บ
	1,1-Dichloroethane	5.	ע
	1,2-Dichloroethene (total)	5.	U
	Chloroform	5.	שׁ
107-06-2	1,2-Dichloroethane	5.	שׁן
78-93-3	2-Butanone	10.	ַט
71-55-6	1,1,1-Trichloroethane	5.	ן ט
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl AcetateBromodichloromethane	10.	ŲΨ
75-27-4	Bromodichloromethane	. 5 .	U
78-87-5 	1,2-Dichloropropane	5.	ט
10061-01-5- 	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	טן
79-00-5 	1,1,2-Trichloroethane	5.	ע
71-43-2	Benzene	5.	ט
10061-02-6	trans-1,3-Dichloropropene	5.	ט
75-25-2	Bromoform	5.	ט
108-10-1	4-Methyl-2-Pentanone	10.	ש
591-78-6	2-Hexanone	10.	ט
	Tetrachloroethene	5.	ט
79-34-5- 	1,1,2,2-Tetrachloroethane	5.	ט
108-88-3	Toluene	5.	ש
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

-		
EPA	SAMPLE	NO.

	GH318	
1051		ł

Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.:

SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0716

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8261

Level: (low/med) LOW

Date Received: 8/13/89

% Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	NO SIGNIFICANT PEAKS PRESENT			====
2				ļ
3		·		ļ ——
5				
6				
7 • 4				
8				
9 _				
0		·		\
1			· · · · · · · · · · · · · · · · · · ·	
.3.				
.4.				
.5.		-		
.0.	· · · · · · · · · · · · · · · · · · ·	-		
.7.	· · · · · · · · · · · · · · · · · · ·			
9.		-		
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4 ± •		_		
		-		
33. · · · ·		-		l
24.		-		
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30	· ·	_		.]

T45 Dump 2 landfill

Shunjanunga Creek & Cree Fill

EPA SAMPLE NO.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH314

Lab Name: RECMD Contract: 68W80051

5. (g/mL) G

Sample wt/vol:

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0712

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 28. Date Analyzed: 8/26/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

Lab File ID: C8502

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3Chloromethane	14.	บ
74-83-9Bromomethane	14.	บ
75-01-4Vinyl Chloride	14.	ט
75-00-3Chloroethane	14.	บ
75-09-2Methylene Chloride	49.	В
67-64-1Acetone	14.	<u></u> ד
75-15-0Carbon Disulfide	7.	บ
75-35-41,1-Dichloroethene	7.	บ
75-34-31,1-Dichloroethane	7.	บ
540-59-01,2-Dichloroethene (total)_	7.	บ
67-66-3Chloroform	7.	ซ
107-06-21,2-Dichlorcethane	7.	บ
78-93-32-Butanone	14.	Ū
71-55-61,1,1-Trichloroethane	7.	ט
56-23-5Carbon Tetrachloride	7.	ט ט
108-05-4Vinyl Acetate	14.	ט
75-27-4Bromodichloromethane	7.	ט
78-87-51,2-Dichloropropane	7.	ט
10061-01-5cis-1,3-Dichloropropene	7.	ט
79-01-6Trichloroethene	7.	Ü
124-48-1Dibromochloromethane	7.	U
79-00-51,1,2-Trichloroethane	7.	U
71-43-2Benzene	7.	Ü
10061-02-6trans-1,3-Dichloropropene	7.	lü
75-25-2Bromoform	7.	ľű
108-10-14-Methyl-2-Pentanone	14.	U
591-78-62-Hexanone	14.	שׁ
127-18-4Tetrachloroethene	7.	Ü
	7.	Ü
79-34-51,1,2,2-Tetrachloroethane	7.	บ
108-88-3Toluene	.1	I -
108-90-7Chlorobenzene	7.	U
100-41-4Ethylbenzene		U
100-42-5Styrene 1330-20-7	7.	U
1330-20-7Xylene (total)	7.	ט
1	i	.

T45	Shunganunya Creek 2 Crock Rd	
	EPA SAMPLE NO.	

			
TENTATIVELY	IDENTIFIED	COMPOUNDS	
			GH314

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH305

Matrix: (soil/water) SOIL Lab Sample ID: AS0712

Sample wt/vol: 5. (g/mL) G Lab File ID: C8502

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec. 28. Date Analyzed: 8/26/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

Number TICs found: 1 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	UNKNOWN HYDROCARBON	17.55	10.	J
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J.				
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7	-	<u> </u>		
9				
1.				
4	_			
J	_			
4	_	 		
5		—-		
6. 7.	-			
8				
9.				
0.	-			

GH327

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0725

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8358

Tevel: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	10. 10. 10. 12. 10. 5. 5. 5. 5.	מממממממממממממ
74-83-9Bromomethane 75-01-4	10. 10. 12. 10. 5. 5. 5. 5. 5.	ם ם ם ם ם ם ם ם ם ם
75-00-3Chloroethane 75-09-2Methylene Chloride 67-64-1Acetone 75-15-0Carbon Disulfide 75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethane 540-59-01,2-Dichloroethene (total) 67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5	10. 12. 10. 5. 5. 5. 5. 5.	ם מ מ מ מ מ מ מ מ מ מ מ מ מ מ מ מ
75-00-3Chloroethane 75-09-2Methylene Chloride 67-64-1Acetone 75-15-0Carbon Disulfide 75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethane 540-59-01,2-Dichloroethene (total) 67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5	12. 10. 5. 5. 5. 5. 5.	8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
75-09-2Methylene Chloride 67-64-1Acetone 75-15-0Carbon Disulfide 75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethane 540-59-01,2-Dichloroethene (total) 67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	10. 5. 5. 5. 5. 5.	ם ם ם ם ם ם
67-64-1	5. 5. 5. 5. 10. 5.	ם ם ם ם ם
75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethane 540-59-01,2-Dichloroethene (total) 67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5tis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 79-00-51,1,2-Trichloroethane	5. 5. 5. 5. 10.	ם ט ט ט ט
75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethane 540-59-01,2-Dichloroethene (total) 67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5tis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 79-00-51,1,2-Trichloroethane	5. 5. 5. 5. 10.	ם מ מ מ
75-34-31,1-Dichloroethane 540-59-01,2-Dichloroethene (total) 67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	5. 5. 10. 5.	ם מ מ
540-59-01,2-Dichloroethene (total) 67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	5. 5. 10. 5.	บ บ บ
67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	5. 10. 5. 5.	U U U
78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	10. 5. 5.	U U
78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	10. 5. 5.	ับ
71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	5. 5.	-
56-23-5Carbon Tetrachloride 108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	5.	Ū
108-05-4Vinyl Acetate 75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene		
75-27-4Bromcdichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene		U
78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	5.	บิ
10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	5.	ט
79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene	5.	ប
124-48-1Dibromochloromethane	5.	U
79-00-51,1,2-Trichloroethane	5.	ប
71-43-2Benzene	5.	U
	5.	Ū
10061-02-6trans-1,3-Dichloropropene	5.	Ū
75-25-2Bromoform	5.	lσ
108-10-14-Methyl-2-Pentanone	10.	ט
591-78-62-Hexanone	10.	ט
127-18-4Tetrachloroethene	5.	U
79-34-51,1,2,2-Tetrachloroethane	5.	υ.
108-88-3Toluene	5.	ט
108-90-7Chlorobenzene	5.	ט
100-41-4Ethylbenzene	5.	U
100-42-5Styrene	5.	ט
1330-20-7Xylene (total)	5.	Ū

GH328

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0728

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8359

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.			 -
74-87-3	Chloromethane	10.	ט
74-83-9	Bromcmethane	10.	U
75-01-4	Vinyl Chloride	10.	ט
75-00-3	Chloroethane	10.	ប
75-09-2	Chloroethane Methylene Chloride	9.	B
67-64-1	AcetoneCarbon Disulfide	10.	Ū
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene) 5.	U
75-34-3	1,1-Dichloroethane	5.	ប
540-59-0	1,2-Dichloroethene (total)_	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone 1,1,1-Trichloroethane	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	ט
108-05-4	Vinyl Acetate	10.	U
75-27-4	Vinyl AcetateBromcdichloromethane	5.	ן ט
78-87-5	1,2-Dichloropropane	5.	ַ ע
10061-01-5	cis-1,3-Dichloropropene	5.	ַט
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	ի 5.	שׁ
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	\ប
10061-02-6	trans-1,3-Dichloropropene	5.	U
	Bromoform	5.	ע
108-10-1	4-Methyl-2-Pentanone	10.	ַ
591-78-6	2-Hexanone	10.	∖ט
127-18-4	Tetrachloroethene	5.	ט
	1,1,2,2-Tetrachloroethane	5.	ប
108-88-3	Toluene	5.	Ū
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene Xylene (total)	5.	U
1330-20-7	Xylene (total)	5.	ับ

GH331

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0729

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8305

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/24/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO. COMPOUND CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

			
74-87-3Chloromethane		10.	ប
74-83-9Bromomethane		10.	U
75-01-4Vinyl Chloride		10.	U
75-00-3Chloroethane	i	10.	U
75-09-2Methylene Chlo	ride	5.	ប
67-64-1Acetone		10.	U
75-15-0Carbon Disulfi	de	5.	บ
75-35-41,1-Dichloroet	hene	5.	Ū
75-34-31,1-Dichloroet	hane	5.	บ
540-59-01, 2-Dichloroet	hene (total)	5.	บ
67-66-3Chloroform	(-) -	5.	บ
107-06-21, 2-Dichloroet	hane	5.	บ
78-93-32-Butanone		10.	ט
71-55-61,1,1-Trichlor	cethane	5.	บ
56-23-5Carbon Tetrach	loride	5.	บ
108-05-4Vinyl Acetate		10.	Ū
75-27-4Bromodichlorom	ethane	5.	ט
78-87-51,2-Dichloropr	opane	5.	Ū
10061-01-5cis-1,3-Dichlo	ropropene	5.	שׁ
79-01-6Trichloroethen	e	5.	U
124-48-1Dibromochlorom	ethane	5.	ט l
79-00-51,1,2-Trichlor		5.	lΰ
71-43-2Benzene		5.	Ū
10061-02-6trans-1,3-Dich	loropropene	5.	Ū
75-25-2Bromoform		5.	Ū
108-10-14-Methyl-2-Per	tanone	10.	บ
591-78-62-Hexanone		10.	Ū
127-18-4Tetrachloroeth		5.	บ
79-34-51,1,2,2-Tetrac		5.	ָ <u>ט</u>
108-88-3Toluene		5.	บี
108-90-7Chlorobenzene		5.	บ
100-41-4Ethylbenzene_		5.	บั
100-41-4		5.	שׁ
1330-20-7Xylene (total)		5.	υ
1 T220-50-1		J.	١

T44 landfill Crace Rd. EPA SAMPLE NO.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH305

ab Name: RECMD

Sample wt/vol:

MD Contract: 68W80051

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Lab Code: RECMD Case No.: 12580 SAS No.:

COMPOUND

SDG No.: GH305

fatrix: (soil/water) SOIL

Lab Sample ID: AS0703

5. (g/mL) G

Lab File ID: C8454

Level: (low/med) LOW

Date Received: 8/18/89

& Moisture: not dec. 14.

Date Analyzed: 8/25/89

lolumn: (pack/cap) PACK

CAS NO.

Dilution Factor:

1.00

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG Q

74-87-3-----Chloromethane 12. U U 12. 74-83-9----Bromomethane U 75-01-4-----Vinyl Chloride 12. U 75-00-3-----Chloroethane_ 12. В 75-09-2----Methylene Chloride_ 40. В 67-64-1------Acetone 13. 75-15-0-----Carbon Disulfide U 6. U 75-35-4----1,1-Dichloroethene_ 6. 75-34-3----1,1-Dichloroethane U 6. U 540-59-0----1,2-Dichlorcethene (total) 6. U 67-66-3-----Chloroform 6. U 107-06-2----1,2-Dichlorcethane 6. U 78-93-3----2-Butanone 12. 71-55-6----1,1,1-Trichloroethane 6. U U 56-23-5-----Carbon Tetrachloride 6. U 108-05-4-----Vinyl Acetate 12. U 75-27-4----Bromodichloromethane 6. 78-87-5----1,2-Dichloropropane 6. U U 10061-01-5----cis-1,3-Dichloropropene ___ 6. U 79-01-6-----Trichloroethene 6. U 124-48-1-----Dibromochloromethane 6. 79-00-5----1,1,2-Trichloroethane U 6. U 71-43-2----Benzene 6. 10061-02-6----trans-1,3-Dichloropropene U 6. U 75-25-2----Bromoform 6. U 108-10-1-----4-Methyl-2-Pentanone 12. 12. U 591-78-6----2-Hexanone_ 127-18-4-----Tetrachloroethene U 6. U 6. 79-34-5----1,1,2,2-Tetrachloroethane __ U 108-88-3----Toluene 6. U 108-90-7-----Chlorobenzene 6. U 6. 100-41-4----Ethylbenzene___ U 6. 100-42-5----Styrene 6. U 1330-20-7-----Xylene (total)___

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

144 landfill EPA SAMPLE NO. 744

GH305	
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Lab Name: RECMD

ab Code: RECMD Case No.: 12580 SAS No.:

Contract: 68W80051

SDG No.: GH305

Matrix: (soil/water) SOIL

Lab Sample ID: AS0703

Sample wt/vol: 5. (g/mL) G

Lab File ID: C8454

▲evel: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec. 14.

Date Analyzed: 8/25/89

Column: (pack/cap) PACK

Dilution Factor:

Number TICs found: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	_	RT	EST. CONC.	Q
1. 75-69 - 4	Methane, trichlorofluoro-	(8)	7.47	6.	J
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		_ :			
4. 5.		.			
.6 • .7 •					
8		-			
1		_ .			-
2		.			
; 4 •					_
25. 26.					
28					
30					·

EPA SAMPLE NO.

GH321

Contract: 68W80051 ib Name: RECMD

tb Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

itrix: (soil/water) WATER

Lab Sample ID: AW0719

imple wt/vol: 5. (g/mL) ML

Lab File ID: C8351

evel: (low/med) LOW

Date Received: 8/18/89

Moisture: not dec.100.

Date Analyzed: 8/23/89

olumn: (pack/cap) PACK

Dilution Factor:

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

			
74-87-3	Chloromethane	10.	ט
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
	Chloroethane	10.	U
	Methylene Chloride	11.	В
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	ט
	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	ប
	1,2-Dichloroethene (total)	5.	υ
	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	ឋ
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	ע
75-27-4	Bromodichloromethane	5.	U
	1,2-Dichloropropane	5.	U
	cis-1,3-Dichloropropene	5.	U
	Trichloroethene	5.	บ
124-48-1	Dibromochloromethane	5.	שׁ
	1,1,2-Trichloroethane	5.	ט
71-43-2	Benzene	5.	ט
10061-02-6	trans-1,3-Dichloropropene	5.	U
	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	ַ
	2-Hexanone	10.	ט
127-18-4	Tetrachloroethene	5.	U
	1,1,2,2-Tetrachloroethane	5.	U
	Toluene	5.	บ
	Chlorobenzene	5.	ប
100-41-4	Ethylbenzene	5.	U
	Styrene	5.	ប
	Xylene (total)	5.	U

GH324

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

Matrix: (soil/water) WATER Lab Sample ID: AW0722

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8316

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

		
74-87-3Chloromethane	10.	ט
74-83-9Bromomethane	10.	บ
75-01-4Vinyl Chloride	10.	υ
75-00-3Chloroethane	10.	U
75-09-2Methylene Chloride	• 12.	В
67-64-1Acetone	10.	U
75-15-0Carbon Disulfide	5.	Ū
75-35-41,1-Dichloroethene	5.	Ū
75-34-31,1-Dichloroethane	5.	Ū.
540-59-01,2-Dichloroethene (total)	5.	Ŭ
67-66-3Chloroform	5.	บ
107-06-21,2-Dichloroethane	5.	บ
78-93-32-Butanone	10.	Ū
71-55-61,1,1-Trichloroethane	5.	ប
56-23-5Carbon Tetrachloride	5.	บ
108-05-4Vinyl Acetate	10.	บั
75-27-4Bromodichloromethane	5.	Ū
78-87-51,2-Dichloropropane	5.	Ū
10061-01-5cis-1,3-Dichloropropene	5.	บ
79-01-6Trichloroethene	5.	บ
124-48-1Dibromochloromethane	5.	U
79-00-51,1,2-Trichloroethane	5.	Ū
71-43-2Benzene	5.	บ
10061-02-6trans-1,3-Dichloropropene	5.	บ
75-25-2Bromoform	5.	บ
108-10-14-Methyl-2-Pentanone	10.	שו
591-78-62-Hexanone	10.	บ
127-18-4Tetrachloroethene	5.	שו
79-34-51,1,2,2-Tetrachloroethane	5.	ט
108-88-3Toluene	5.	U
108-90-7Chlorobenzene	5.	Ū
100-41-4Ethylbenzene	5.	ט
100-42-5Styrene	5.	Ü
1330-20-7Xylene (total)	5.	บั
1550 20 / Nytone (books)	.] _
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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH323

áb Name: RECMD

Contract: 68W80051

atrix: (soil/water) WATER

ab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

Lab Sample ID: AW0721

ample wt/vol: 5. (g/mL) ML

Lab File ID: C8315

evel: (low/med) LOW

Date Received: 8/18/89

Moisture: not dec.100.

Date Analyzed: 8/22/89

Dilution Factor: 1.00

olumn: (pack/cap) PACK

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND (ug/ L OI ug	/kg/ dd/b	<u> </u>
74-87-3	Chloromethane	10.	ט
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75 00 0	Chilana athana	10.	ש
75-09-2	Methylene Chloride	13.	В
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	ប
75-35-4 -	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	บ
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform_	5.	U
107-06-2	1,2-Dichloroethane	5.	ט
	2-Butanone	10.	ט
71-55-6	1,1,1-Trichloroethane	5.	ט
56-23-5	Carbon Tetrachloride	5.	ט
108-05-4	Vinyl Acetate	10.	ט
75-27-4	Bromodichloromethane	5.	טן
	1,2-Dichloropropane	5.	ט
10061-01-5	cis-1,3-Dichloropropene	· 5.	ט
79-01-6	Trichloroethene	5.	טן
124-48-1	Dibromochloromethane	5.	ט
79-00-5	1,1,2-Trichloroethane	5.	ן ט
71-43-2	Benzene	5.	ט
10061-02-6	trans-1,3-Dichloropropene	5.	U
	Bromoform	⁻ 5.	שׁ
	4-Methyl-2-Pentanone	10.	U
	2-Hexanone	10.	ש
	Tetrachloroethene	⁻ 5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene		U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	บ
	Xylene (total)	5.	ט

EPA SAMPLE NO.

GH320

b Name: RECMD Contract: 68W80051

Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

trix: (soil/water) WATER

Lab Sample ID: AW0718

imple wt/vol: 5. (g/mL) ML

Lab File ID: C8312

Date Received: 8/18/89

Moisture: not dec.100.

el: (low/med) LOW

Date Analyzed: 8/22/89

olumn: (pack/cap) PACK

Dilution Factor:

CONCENTRATION UNITS: COMPOUND CAS NO.

(ug/L or ug/Kg) UG/L

74-87-3	Chloromethane	10.	U
	Bromomethane	10.	ָ [±]
75-01-4	Vinyl Chloride	10.	ט
	Chloroethane	10.	ט
75-09-2	Methylene Chloride	17.	В
	Acetone	10.	ט
75-15-0	Carbon Disulfide	5.	ט
75-35-4	1,1-Dichloroethene	5.	ט
	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	ប
	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	שׁ
	2-Butanone	10.	ַ
71-55-6	1,1,1-Trichloroethane	5.	ט
56-23-5	Carbon Tetrachloride	5.	שׁ
108-05-4	Vinyl Acetate	10.	ַ ט
75-27-4	Bromcdichloromethane	5.	ប
78-87-5	1,2-Dichloropropane	5.	ប
10061-01-5	cis-1,3-Dichloropropene	5.	ַט
79-01-6	Trichloroethene	5.	ับ
124-48-1	Dibromochloromethane	5.	ַ
79-00-5	1,1,2-Trichloroethane	5.	U
	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	ש
		· 1	U
108-10-1	Bromoform 4-Methyl-2-Pentanone	10.	ับ
	2-Hexanone	10.	ט
127-18-4	Tetrachloroethene	5.	U
	1,1,2,2-Tetrachloroethane	5.	[ט
	Toluene	5.	ប
	Chlorobenzene	5.	ן ט
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	ש
1330-20-7	Xylene (total)	5.	ט

MW1S EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

GH320

Lab Name: RECMD Contract: 68W80051 Lab Code: RECMD Case No.: 12580 SAS No.:

SDG No.: GH312

Matrix: (soil/water) WATER

Lab Sample ID: AW0718

Sample wt/vol: 5. (g/mL) ML

Lab File ID: C8312

Level: (low/med) LOW

Date Received: 8/18/89

& Moisture: not dec.100.

Date Analyzed: 8/22/89

Dilution Factor: 1.00

Column: (pack/cap) PACK

CONCENTRATION UNITS:

Number TICs found: 1

(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. – – 2.	UNKNOWN HYDROCARBON	13.59	6.	J
3. 4. 5.				
6				
8. 9. 10.				
12				
13. 14. 15.				
16. 17.				
18. 19. 20.				
21. 22.				
24.				
26. 27.				
28. 29.				
30				

1/87 Rev.

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

GH304 Contract: 68W80051

Lab Name: RECMD

▲ Lab Code: RECMD Case No.: 12580 SAS No.:

SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0702

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8254

▲ Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	NO SIGNIFICANT PEAKS PRESENT			
2				
4				
5				
6				
7.4				
8				l
9				
10			<u> </u>	l
11			\	<u> </u>
12				ļ
13.			<u></u>]
14.	 			l
12.			<u> </u>	l
10.				l
1/]
18.				l
19				
20				
41.			<u></u>	
22				l
22.				
24.				\
45.				
20.				
41.				
40.				\ <u> </u>
29				
30			\	.1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH326

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0724

Sample wt/vol: 5. (g/mL) ML Lab File ID: C8357

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3Chloromethane 10. U 74-83-9Bromomethane 10. U 75-01-4Vinyl Chloride 10. U 75-00-3Chloroethane 10. U 75-009-2Methylene Chloride 12. B 67-64-1Acetone 10. U 75-15-0Carbon Disulfide 5. U 75-35-41,1-Dichloroethane 5. U 75-34-31,1-Dichloroethane 5. U 67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 5. U 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropane 5. U 79-01-6Trichloroethane 5. U 79-01-6			, 1.9, 00, 2	~
74-83-9Bromomethane 10. U 75-01-4Vinyl Chloride 10. U 75-00-3Chloroethane 10. U 75-09-2	74-87-3	Chloromethane	10.	U
75-01-4Vinyl Chloride 10. U 75-00-3Chloroethane 10. U 75-09-2Methylene Chloride 12. B 67-64-1Acetone 10. U 75-15-0Carbon Disulfide 5. U 75-35-41,1-Dichloroethene 5. U 75-34-31,1-Dichloroethane 5. U 67-66-31,2-Dichloroethane 5. U 107-06-21,2-Dichloroethane 2. J 78-93-3			1	Ū
75-00-3Chloroethane 10. U 75-09-2Methylene Chloride 12. B 67-64-1Acetone 10. U 75-15-0Carbon Disulfide 5. U 75-35-41,1-Dichloroethane 5. U 75-34-31,1-Dichloroethane 5. U 540-59-01,2-Dichloroethane 5. U 67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 2. J 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6				ט
75-09-2Methylene Chloride 12. B 67-64-1Acetone 10. U 75-15-0Carbon Disulfide 5. U 75-35-41,1-Dichloroethene 5. U 75-34-31,1-Dichloroethane 5. U 540-59-01,2-Dichloroethane 5. U 67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 2. J 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 78-87-51,2-Dichloropropane 5. U 10061-01-5is-1,3-Dichloropropane 5. U 10061-01-5is-1,3-Dichloropropene 5. U 79-01-6Trichloroethane 5. U 79-01-6Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6	75-00-3	Chloroethane	. 1	_
67-64-1	75-09-2	Methylene Chloride	• 1	В
75-15-0Carbon Disulfide 5. U 75-35-41,1-Dichloroethene 5. U 75-34-31,1-Dichloroethane 5. U 540-59-01,2-Dichloroethene (total) 5. U 67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 2. J 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 5. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 1061-02-6	67-64-1		10.	ับ
75-35-41,1-Dichloroethene 5. U 75-34-31,1-Dichloroethane 5. U 540-59-01,2-Dichloroethene (total) 5. U 67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 2. J 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 108-05-4Vinyl Acetate 10. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 107-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U <t< td=""><td>75-15-0</td><td>Carbon Disulfide</td><td>• •</td><td>U</td></t<>	75-15-0	Carbon Disulfide	• •	U
75-34-31,1-Dichloroethane 5. U 540-59-01,2-Dichloroethene (total) 5. U 67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 2. J 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5Trichloroethene 5. U 79-01-6Trichloroethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	75-35-4	1,1-Dichloroethene	1 5.	U
540-59-01,2-Dichloroethene (total) 5. U 67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 2. J 78-93-32-Butanone 10. U 71-55-61,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-51,3-Dichloropropene 5. U 79-01-6Trichloroethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6	75-34-3	1,1-Dichloroethane	5.	บ
67-66-3Chloroform 5. U 107-06-21,2-Dichloroethane 2. J 78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromcdichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethane 5. U 79-01-6Trichloroethane 5. U 79-00-51,1,2-Trichloroethane 5. U 7061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3	540-59-0	1,2-Dichloroethene (total)	j 5.	U
78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 5. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U			ʻl 5.	U
78-93-32-Butanone 10. U 71-55-61,1,1-Trichloroethane 5. U 56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 5. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	107-06-2	1,2-Dichloroethane	2.	J
56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromcdichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 5. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	78-93-3	2-Butanone	10.	U
56-23-5Carbon Tetrachloride 5. U 108-05-4Vinyl Acetate 10. U 75-27-4Bromcdichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 5. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	71-55-6	1,1,1-Trichloroethane	5.	שׁ
108-05-4Vinyl Acetate 10. U 75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 5. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 1061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	56-23-5	Carbon Tetrachloride		U
75-27-4Bromodichloromethane 5. U 78-87-51,2-Dichloropropane 5. U 10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 5. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 1061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	108-05-4	Vinyl Acetate	10.	บ
78-87-51, 2-Dichloropropane 5. U 10061-01-5cis-1, 3-Dichloropropene 5. U 79-01-6Trichloroethene 5. U 124-48-1Dibromochloromethane 5. U 79-00-51, 1, 2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1, 3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51, 1, 2, 2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	75-27-4	Bromcdichloromethane	5.	ַ ע
10061-01-5cis-1,3-Dichloropropene 5. U 79-01-6Trichloroethene 5. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	78-87-5	1,2-Dichloropropane		ับ
79-01-6Trichloroethene 5. U 124-48-1Dibromochloromethane 5. U 79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U			5.	U
79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	79-01-6	Trichloroethene		ט
79-00-51,1,2-Trichloroethane 5. U 71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	124-48-1	Dibromochloromethane	5.	ับ
71-43-2Benzene 5. U 10061-02-6trans-1,3-Dichloropropene 5. U 75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	79-00-5	1,1,2-Trichloroethane	5.	ן ט
75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	71-43-2	Benzene		U
75-25-2Bromoform 5. U 108-10-14-Methyl-2-Pentanone 10. U 591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	10061-02-6	trans-1,3-Dichloropropene	5.	[ซ
591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	75-25-2	Bromoform		บ
591-78-62-Hexanone 10. U 127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	108-10-1	4-Methyl-2-Pentanone	10.	ע
127-18-4Tetrachloroethene 5. U 79-34-51,1,2,2-Tetrachloroethane 5. U 108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	591-78-6	2-Hexanone	10.	บ
108-88-3Toluene 5. U 108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	127-18-4	Tetrachloroethene	5.	U
108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U			<u>[</u> 5.	1 -
108-90-7Chlorobenzene 5. U 100-41-4Ethylbenzene 5. U	108-88-3	Toluene	5.	שׁ
100-41-4Ethylbenzene 5. U	108-90-7	Chlorobenzene	5.	ן ט
100-42-5Styrene 5. U 1330-20-7Xylene (total) 5. U	100-41-4	Ethylbenzene	5.	ប
1330-20-7Xylene (total) 5. U	100-42-5	Styrene	5.	ַ ט
	1330-20-7	Xylene (total)	5.	ប
			-	

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT Kansas Health & Environmental Laboratory Organic Chemistry Laboratory Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: LISA LARSEN

Address: FORBES BLDG. 740, TOPEKA, KS. 66620

Lab Number: 0004460C Report Date: 8-18-89

SAMPLE COLLECTION INFORMATION

Sample Identification Number: 00SWSWSE231116E #47 Sample Type: WATER Collection Site: 04089065 TOPEKA/MOORE CURTIS MOORE, 1206 NE KINCAID (SN CO) Collected By: LARSEN/COOPER Date: 8-16-89 Time: 0905

RESULTS OF ANALYSIS

PURGABLE ORGANICS	Concentration (UG/L) NOT DETECTED NOT DETECTED	Detection Limit
	(UG/L)	(ngľr)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.0
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
TRANS & OR CIS 1,2-DICHLOROETHYLENE	NOT DETECTED	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANÈ	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
CHLOROETHANE DICHLOROMETHANE 1,1-DICHLOROETHYLENE 1,1-DICHLOROETHANE TRANS &/OR CIS 1,2-DICHLOROETHYLENE TRICHLOROMETHANE (THM) 1,2-DICHLOROETHANE 1,1,1-TRICHLOROETHANE TETRACHLOROMETHANE BROMODICHLOROMETHANE (THM) 1,2-DICHLOROPROPANE TRANS 1,3-DICHLOROPROPENE TRICHLOROETHYLENE BENZENE DIBROMOCHLOROMETHANE (THM) CIS 1,3-DICHLOROPROPENE 1,1,2-TRICHLOROETHANE BROMOFORM (THM) 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHYLENE TOLUENE CHLOROBENZENE	NOT DETECTED	0.5
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	NOT DETECTED	1.1
TOLUENE	NOT DETECTED	0.5
CHLOROBENZENE	NOT DETECTED	0.5
ETHYLBENZENE	NOT DETECTED	0.7
META-XYLENE		0.6
ORTHO & OR PARA-XYLENE	NOT DETECTED NOT DETECTED	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0

Analyst: RICHARD L. PIERCE All Roger H. Carlson, Ph.D., Director

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KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT Kansas Health & Environmental Laboratory Organic Chemistry Laboratory Topeka, Kansas 66620

ANALYSIS

REPORT

LISA LARSEN Report To:

FORBES BLDG. 740, TOPEKA, KS. Address: 66620

GC/MS

Lab Number:

0004470C -

Report Date:

8-18-89

SAMPLE COLLECTION INFORMATION

Sample Identification Number: 00NWSWNW341116E #46 Sample Type: WATER Collection Site: 04089065 TOPEKA/FISHER ALMA FISHER, 3321 BATES

(SN CO.) Collected By: LARSEN/COOPER 8-16-89 Time: 1006 Date:

RESULTS OF ANALYSIS

PURGABLE ORGANICS	Concentration (UG/L) NOT DETECTED NOT DETECTED NOT DETECTED	Detection Limit
	(UG/L)	(UG/L) 5.0 1.2
CHLOROMETHANE	NOT DETÉCTED	`5.0 ′
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CILURUETHANE	NOT DETECTED	3. /
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
DICHLOROMETHANE 1,1-DICHLOROETHYLENE 1,1-DICHLOROETHANE TRANS &/OR CIS 1,2-DICHLOROETHYLENE TRICHLOROMETHANE (THM) 1,2-DICHLOROETHANE 1,1,1-TRICHLOROETHANE TETRACHLOROMETHANE BROMODICHLOROMETHANE (THM) 1,2-DICHLOROPROPANE TRANS 1,3-DICHLOROPROPENE TRICHLOROETHYLENE	NOT DETECTED	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
BENZENE	NOT DETECTED	0.5
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
BENZENE DIBROMOCHLOROMETHANE (THM) CIS 1,3-DICHLOROPROPENE 1,1,2-TRICHLOROETHANE BROMOFORM (THM) 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHYLENE TOLUENE CHLOROBENZENE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	NOT DETECTED	1.1
TOLUENE	NOT DETECTED	0.5
CHLOROBENZENE	NOT DETECTED	0.5
ETHYLBENZENE	NOT DETECTED	0.7
META-XYLENE	NOT DETECTED	0.6
ORTHO & OR PARA-XYLENE	NOT DETECTED	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
ETHYLBENZENE META-XYLENE ORTHO &/OR PARA-XYLENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0

Analyst: RICHARD L. PIERCE

Roger H. Carlson, Ph.D., Director

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BUREAU OF ENVIRONMENTAL REMEDIATION

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH322

ab Name: RECMD Contract: 68W80051

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Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH312

atrix: (soil/water) WATER Lab Sample ID: AW0720

ample wt/vol: 5. (g/mL) ML Lab File ID: C8314

Del: (low/med) LOW Date Received: 8/18/89

Moisture: not dec.100. Date Analyzed: 8/22/89

olumn: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L

74-87-3	Chloromethane	10.	ט
	Bromomethane	10.	U
	Vinyl Chloride	10.	Ü
75-00-3	Chloroethane	10.	Ū
75-09-2	Methylene Chloride	8.	В
67-64-1		10.	Ū
	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	Ū
75-34-3	1,1-Dichloroethane	5.	Ū
	1,2-Dichloroethene (total)	5.	Ü
	Chloroform	5.	Ū
	1,2-Dichloroethane	5.	Ū
	2-Butanone	10.	Ū
71-55-6	1,1,1-Trichloroethane	5.	Ū
56-23-5	Carbon Tetrachloride	5.	Ū
	Vinyl Acetate	10.	Ū
	Bromodichloromethane	5.	Ū
	1,2-Dichloropropane	5.	υ
	cis-1,3-Dichloropropene	5.	U
	Trichloroethene	5.	บ
	Dibromochloromethane	5.	บ
	1,1,2-Trichloroethane	5.	ט
	Benzene	5.	ט
	trans-1,3-Dichloropropene	5.	บ
	Bromoform	5.	บั
	4-Methyl-2-Pentanone	10.	Ü
	2-Hexanone	10.	Ū
	Tetrachloroethene	2.	J
	1,1,2,2-Tetrachloroethane	5.	ט
	Toluene	5.	υ
	Chlorobenzene	5.	บ
100-30-7	Ethylbenzene	5.	Ū
100-41-4	Styrene	5.	ט
		5.	שׁ
1330-20-7	Xylene (total)	.	١٠

EPA SAMPLE NO.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH304

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0702

- - -

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8254

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

		<u> </u>	
74-87-3	Chloromethane	10.	ט
74-83-9	Bromcmethane	10.	U
75-01-4	Vinvl Chloride	10.	U
75-00-3	Chlorcethane	10.	U
75-09-2	Chlorcethane	2	BJ
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	Ū
75-35-4	1,1-Dichlorcethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
	1,2-Dichloroethene (total)	5.	ប
	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	υ
78-93-3	2-Butanone	10.	ប
71-55-6	1,1,1-Trichloroethane	5.	ប
56-23-5	Carbon Tetrachloride	5.	ט
108-05-4	Vinyl Acetate	10.	ប
75-27-4	Bromcdichloromethane	5.	U
	1,2-Dichloropropane	5.	ן ט
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	· 5.	U
124-48-1	Dibromochloromethane	' 5.	ט
79-00-5	1,1,2-Trichloroethane	i 5.	ן ט
	Benzene	ˈl 5.	ַ
	trans-1,3-Dichloropropene	ʻ 5 .	U
	Bromoform	5.	ַ
108-10-1	4-Methyl-2-Pentanone	10.	ט
591-78-6	2-Hexanone	10.	ש
127-18-4	Tetrachloroethene.	⁻ 5.	U
	1,1,2,2-Tetrachloroethane	5.	ט
108-88-3		5.	ប
	Chlorobenzene		שׁן
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	Ū
1330-20-7	Xylene (total)	5.	שׁ

5000 NE Seward EPA SAMPLE NO.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH307

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0705

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8212

Level: (lcw/med) LOW Date Received: 8/13/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

		
74-87-3Chloromethane	10.	บ
74-83-9Bromomethane	10.	U
75-01-4Vinyl Chloride	10.	ប
75-00-3Chloroethane_	10.	ប
75-09-2Methylene Chloride	8.	В
67-64-1Acetone	10.	U
75-15-0Carbon Disulfide	5.	ប
75-35-41,1-Dichloroethene	5.	U
75-34-31,1-Dichloroethane	5.	U
540-59-01,2-Dichloroethene (total	5.	บ
67-66-3Chloroform	5.	U
107-06-21,2-Dichloroethane	5.	U
78-93-32-Butanone	10.	U
71-55-61,1,1-Trichloroethane	5.	Ū
56-23-5Carbon Tetrachloride	5.	U
108-05-4Vinyl Acetate	10.	Ū
75-27-4Bromodichloromethane	5.	U
78-87-51,2-Dichloropropane	5.	U
10061-01-5cis-1,3-Dichloropropene	5.	บ
79-01-6Trichloroethene	5.	U
124-48-1Dibromochloromethane	5.	U
79-00-51,1,2-Trichloroethane	5.	Ū
71-43-2Benzene	5.	ט
10061-02-6trans-1,3-Dichloropropene	5.	Ū
75-25-2Bromoform	5.	Ū
108-10-14-Methyl-2-Pentanone	10.	ט
591-78-62-Hexanone	10.	ט
127-18-4Tetrachloroethene	5.	שׁ
79-34-51,1,2,2-Tetrachloroethane		U
108-88-3Toluene	5.	Ū
108-90-7Chlorobenzene	5.	Ū
100-41-4Ethylbenzene		Ū
100-42-5Styrene	5.	บ็
1330-20-7Xylene (total)	5.	Ū
]

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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5000	ΝĒ	Sewi	ril
EPA S	AM:	PLE	NO

GH307	,
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Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.:

SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0705

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8212

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/22/89

Column: (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS: Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	NO SIGNIFICANT PEAKS PRESENT		=======================================	=====
1	144 ploint duti 1 ===================================			
2				
·]		
4				
5				
0				
7.4				
0.				
9				
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21.				
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23	· 	.]		<u> </u>
24				
43.		.		
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28				<u> </u>
29]
30	·	_		

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH308

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0706

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8213

Level: (low/med) LOW Date Received: 3/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO.	COMPOUND (u	g/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromcuethane	10.	l l
	Vinyl Chloride		
	Chloroethane	10.	1 -
75-09-2	Methylene Chloride	7.	
	Acetone	10.	
	Carbon Disulfide	5.	
	1,1-Dichlorcethene_		t .
75-34-3	1,1-Dichlorcethane	5.	
	1,2-Dichloroethene		
	Chloroform	5.	
107-06-2	1,2-Dichlorcethane	5.	
	2-Butanone		I
	1,1,1-Trichloroetha		1 -
56-23-5	Carbon Tetrachlorid	e	
108-05-4	Vinyl Acetate	10.	
75-27-4	Bromcdichloromethan	e 5.	\$ -
78-27-5	1,2-Dichloropropane	5.	4
10061-01-5	cis-1,3-Dichloropro	pene 5.	
79-01-6	Trichloroethene	5.	
	Dibromochloromethar		B .
	1,1,2-Trichloroetha		
	Benzene		
10061-02-6	trans-1,3-Dichloron	propene 5.	1
		<u> </u>	
100 10 1	Bromoform 4-Methyl-2-Pentanor		
591-/8-6	2-Hexanone Tetrachloroethene	10.	
			1
79-34-5	1,1,2,2-Tetrachlord	pethane 5.	
108-88-3	Toluene	5	1
108-90-7	Chlorobenzene		1
100-41-4	Ethylbenzene	5	1 .
100~42-5~	Styrene Xylene (total)	5	
1330-20-7	Xylene (total)	5	. U

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

	Netwood SAMPLE	NO.
GH	308	

Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

THI

Matrix: (soil/water) WATER

Lab Sample ID: AW0706

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8213

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/22/89

Column: (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER COMPOUND NAME RT EST. CONC. Q _______ NO SIGNIFICANT PEAKS PRESENT 10.___ 11.___ 12. 13.____ 14.____ 15.____ 16.___ 17.___ 18.___ 19.____ 20.___ 21.____ 22.____ 23.____ 24.____ 25.____ 26.____ 27.____ 28.____ 29.__ 30.___

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH315

Lab Name: RECMD Contract: 68W80051

Pab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0713

Sample wt/vol: 5. (g/mL) ML . Lab File ID: A8258

Pevel: (lcw/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPCUND (ug/L or ug/Kg) UG/L C

_				ı
	74-87-3	Chloromethane	10.	ט
	74-83-9	Bromcmethane	10,	<u> </u>
	75-01-4	Vinyl Chloride	10.	ט
	75-00-3	Chlorcethane	10.	Ū
	75-09-2	Methylene Chloride	5.	<u>"</u>
1		Acetone	10.	บ
	75-15-0	Carbon Disulfide	5.	ט
e	75-35-4	1,1-Dichloroethene	5.	U
		1,1-Dichloroethane	5.	ט
		1,2-Dichloroethene (total)	5.	Ū
		Chloroform	5.	บ
		1,2-Dichloroethane	5.	ט
l		2-Butanone	10.	ָ ע
	71-55-6	1,1,1-Trichloroethane	5.	Ü
l	56-23-5	Carbon Tetrachloride	5.	บ
	108-05-4	Vinyl Acetate	10.	บ
	75-27-4	Bromcdichloromethane	5.	บ
1		1,2-Dichloropropane	5.	Ū
١.	10061-01-5	cis-1,3-Dichloropropene	5.	Ū
	79-01-6	Trichloroethene	5.	บ
l	124-48-1	Dibrcmochloromethane	5.	Ū
l	79-00-5	1,1,2-Trichloroethane	5.	Ū
l		Benzene	5.	ט
١		trans-1,3-Dichloropropene	5.	l ប
١		Bromeform	5.	ט
Į		4-Methyl-2-Pentanone	10.	Ū
l		2-Hexanone	10.	Ū
ł		Tetrachloroethene	5.	Ū
١		1,1,2,2-Tetrachloroethane	5.	Ū
١		Toluene	5.	ט
Į		Chloropenzene	5.	U
	100-41-4	Ethylbenzene	5.	Ū
١		Styrene	5.	บ
1		Xylene (total)	5.	U
-	1330 20 7		1	
ı			· · · · · · · · · · · · · · · · · · ·	. —

lΕ VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

T35 125 Norwood EPA SAMPLE NO.

GH315	
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Lab Name: RECMD

Contract: 68W30051

Lab Code: RECMD Case No.: 12580 SAS No.:

SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0713

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8258

Level: (low/med) LOW

Date Received: 8/13/89

% Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor:

1.00

CONCENTRATION UNITS:

Number TICs found:

(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	NO SIGNIFICANT PEAKS PRESENT	=======		=====
2				
3.				
4 •				
5		\ <u></u>		
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7.4		·		
8				
9		· · · · · · · · · · · · · · · · · · ·		
11				
12		· 		
13.				
1 74.				
1 72				
16				
1 1 .				
18		-]]
19		-		
20				
21.		-		
22		-		
23				
24		-		l —— l
25.		-		
27.		-		
28.				
29.				
30.				
				[

T42 200 Norwood EPA SAMPLE NO.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH329

Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD

Case No.: 12580 SAS No.:

SDG No.: GH319

Matrix: (soil/water) WATER

Lab Sample ID: AW0727

Sample wt/vol:

5. (g/mL) ML

Lab File ID: C8551

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/27/89

Column: (pack/cap) PACK

Dilution Factor:

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

Q

74-87-3	Chloromethane	10.	U
	Bromomethane	10.	lū
75-01-4	Vinyl Chloride	10.	ט
75-00-3	Chloroethane	10.	Ū
75-09-2	Methylene Chloride	8.	В
	Acetone	10.	ប
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	ט
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	υ
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinvl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	ប
79-01-6	Trichloroethene	5.	ַ ט
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	ט
	trans-1,3-Dichloropropene	5.	ען
	Bromoform	5.	שׁ
	4-Methyl-2-Pentanone	10.	U
	2-Hexanone	10.	U
	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
	Toluene	5.	ן ט
108-90-7	Chlorobenzene	5.	ט
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH332

Lab Name: RECMD Contract: 68W80051

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Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH319

Matrix: (soil/water) WATER Lab Sample ID: AW0730

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8262

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

	(-5, - 02 45,		
74-87-3	Chloromethane	10.	U
	Bromomethane	10.	Ū
	Vinyl Chloride	10.	ט
75-00-3	Chloroethane	10.	ט
	Methylene Chloride	5.	U
	Acetone	10.	ט
	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	שׁ
	1,1-Dichloroethane	5.	ט
	1,2-Dichloroethene (total)	5.	ט
	Chloroform	5.	ט
107-06-2	1,2-Dichloroethane	5.	ט
	2-Butanone	10.	ט
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	ש
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	ט
79-01-6	Trichloroethene	5.	ט
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	ט
	Benzene	5.	ט
	trans-1,3-Dichloropropene	5.	ט
	Bromoform	5.	ט
	4-Methyl-2-Pentanone	10.	ט
	2-Hexanone	10.	ט
	Tetrachloroethene	5.	ប
	1,1,2,2-Tetrachloroethane	5.	ט
	Toluene	5.	ט
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	lΰ
1330-20-7	Xylene (total)	5.	บ

3732 NE Seword EPA SAMPLE NO.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH317

Lab Name: RECMD Contract: 68W80051

Lab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (Soil/water) WATER Lab Sample ID: AW0715

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8260

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L

 			1
74-87-3	Chloromethane	10.	ט
	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	ע ו
75-00-3	Chloroethane	10.	ן ט ן
75-09-2	Methylene Chloride	5.	ט
	Acetone	10.	ប
75-15-0	Carbon Disulfide	5.	U I
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichlorcethane	5.	ប
540-59-0	1,2-Dichloroethene (total)	5.	ן טי
	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	υ ·
71-55-6	1,1,1-Trichloroethane	5.	ប
56-23-5	Carbon Tetrachloride	5.	ប
108-05-4	Vinyl Acetate	10.	ប
75-27-4	Bromodichloromethane	5.	טן
78-87-5	1,2-Dichloropropane	5.	ן ט
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	ט
124-48-1	Dibromochloromethane	5.	υ
	1,1,2-Trichloroethane	5.	ט
	Benzene	5.	U
	trans-1,3-Dichloropropene		ט
	Bromoform	j .	ט
	4-Methyl-2-Pentanone	10.	lυ
	2-Hexanone	10.	ש
	Tetrachloroethene	5.	U
	1,1,2,2-Tetrachloroethane	5.	ט
	Toluene	5.	ប
	Chlorobenzene	5.	ט
	Ethylbenzene	5.	ט
	Styrene	5.	ប
	Xylene (total)	5.	υ
			_
			

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

T30 3732 NE Seward

GH317	
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Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD

Case No.: 12580 SAS No.:

SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0715

Sample wt/vol:

5. (g/mL) ML

Lab File ID: A8260

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor:

1.00

Number TICs found:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	NO SIGNIFICANT PEAKS PRESENT	=======	2225=222=22	====
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7.4				
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4				
.5				
.6				
.7.				
.8.				
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27.				
28				
29.				
30		-	-	

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GH333

Lab Name: RECMD Contract: 68W80051

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Lab Code: RECMD

CAS NO.

Matrix: (soil/water) WATER Lab Sample ID: AW0731

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8263

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/23/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CONCENTRATION UNITS: COMPOUND (ug/L or ug/kg) UG/L

Case No.: 12580 SAS No.: SDG No.: GH319

74-87-3-----Chloromethane 10. U 74-83-9-----Bromcmethane 10. U

1	74-87-3Chloromethane		10.	ט	
1	74-83-9Bromcmethane		10.	ט	
	75-01-4Vinyl Chloride		10.	ט (
١	75-00-3Chloroethane		10.	ַ ט	
1	75-09-2Methylene Chloride		5.	υ	
1	67-64-1Acetone		10.	ט	
١	75-15-0Carbon Disulfide		5.	ט	
Į	75-35-41,1-Dichloroethene		5.	ן ט	
-	75-34-31,1-Dichloroethane		5.	ט	
l	540-59-01,2-Dichloroethene (to	cal)	5.	ן ט	
1	67-66-3Chloroform		5.	ט ו	ı
1	107-06-21,2-Dichloroethane		5.	U	ĺ
	78-93-32-Butanone		10.	U	ĺ
	71-55-61,1,1-Trichloroethane		5.	U	
	56-23-5Carbon Tetrachloride		5.	U	ĺ
-	· -		10.	U	
1	75-27-4Bromodichloromethane		5.	U	ĺ
	73-87-51,2-Dichloropropane		5.	U	
	10061-01-5cis-1,3-Dichloropropen	e	5.	U	
	79-01-6Trichloroethene		5.	U	-
	124-48-1Dibromochloromethane		5.	U	ĺ
	79-00-51,1,2-Trichloroethane		5.	U	
	71-43-2Benzene		5.	U	l
	10061-02-6trans-1,3-Dichloroprop	ene	5.	U	
	75-25-2Bromoform		5.	U	l
	108-10-14-Methyl-2-Pentanone		10.	U	1
	591-78-62-Hexanone		10.	U	ļ
	127-18-4Tetrachloroethene		5.	U	ì
	79-34-51,1,2,2-Tetrachloroeth	ane	5.	ប	1
	108-88-3Toluene		5.	ប	1
	108-90-7Chlorobenzene		· 5.	ប	1
	100-41-4Ethylbenzene		5.	U	1
	100-42-5Styrene		5.	ប	1
	1330-20-7Xylene (total)		5.	ប	
	- , , , , , , , , , , , , , , , , , , ,			1	1

3730 NE Seward EPA SAMPLE NO.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH338

Lab Name: RECMD

50.2

Contract: 68W80051

Lab Code: RECMD

Case No.: 12580 SAS No.:

SDG No.: GH319

Matrix: (soil/water) WATER

Lab Sample ID: AW0736

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8307

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/24/89

Column: (pack/cap) PACK

Dilution Factor:

1.00

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

Q

	Ch l	1.0	
74-87-3	Chloromethane	10.	U T
	Bromomethane	10.	Ū
75-01-4	Vinyl Chloride	10.	U
	Chloroethane	10.	ប
/5-09-2	Methylene Chloride	5.	U
	Acetone	10.	U
	Carbon Disulfide	5.	U
	1,1-Dichloroethene	5.	ט
	1,1-Dichloroethane	5.	Ū
	1,2-Dichloroethene (total)	5.	U
	Chloroform	5.	U
	1,2-Dichloroethane	5.	U
	2-Butanone	10.	ט
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	ַ ט
108-05-4	Vinyl Acetate	10.	U
75-27-4	Vinyl Acetate	5.	U
78-87-5- 	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6- 	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	ט
79-00-5	1,1,2-Trichloroethane	5.	Ū
	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	υ
	Tetrachloroethene	5.	ט
	1,1,2,2-Tetrachloroethane	5.	ט
	Toluene	5.	ַ
108-90-7	Chlorobenzene	5.	ט
100-41-4	Ethylbenzene	5.	ט
100-42-5	Styrene	5.	ש
1330-20-7	Styrene Xylene (total)	5.	ט

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH306

Lab Name: RECMD Contract: 68W80051

ab Code: RECMD Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER Lab Sample ID: AW0704

Sample wt/vol: 5. (g/mL) ML Lab File ID: A8211

Level: (low/med) LOW Date Received: 8/18/89

% Moisture: not dec.100. Date Analyzed: 8/22/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

		T	
74-87-3	Chloromethane	10.	υ
	Bromcmethane	10.	U
75-01-4	Vinyl Chloride	10.	υ
75-00-3	Chlorcethane	10.	U
75-09-2	Methylene Chloride	7.	В
67-64-1	Acetone	10.	ט
75-15-0	Carbon Disulfide	5.	ប
75-35-4	1,1-Dichloroethene	5.	ט
75-34-3	1,1-Dichloroethane	7 5.	U
	1,2-Dichloroethene (total)	5.	ען
	Chloroform	·\ 5.	ט
	1,2-Dichlorcethane	5.	ט
	2-Butanone	10.	บ
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	บ
	Vinyl Acetate	10.	บ
	Bromcdichloromethane	5.	Ū
	1,2-Dichloropropane	5.	บ
	cis-1,3-Dichloropropene	5.	U
	Trichloroethene	5.	Ū
	Dibromochloromethane	5.	บิ
79-00-5	1,1,2-Trichloroethane	5.	บ
	Benzene	5.	บี
	trans-1,3-Dichloropropene	5.	บ
	Bromoform	5.	Ū
	4-Methyl-2-Pentanone	10.	Ū
	2-Hexanone	10.	Ū
	Tetrachloroethene	5.	U
	1,1,2,2-Tetrachloroethane	5.	ŭ
	Toluene	5.	บ
108-90-7	Chloropenzene		Ū
100-30-7	Ethylbenzene	- 5.	บ
		_ !	ט
100~42~5~~	StyreneXylene (total)	5.	Ü
1330-20-7	XAIGUE (COCGI)	-	{ }
		_ [- 1

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

125 RULE NO.

GH306

Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD Case No.: 12530 SAS No.:

SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0704

Sample wt/vol:

5. (g/mL) ML

Lab File ID: A8211

Level: (low/med) LOW

Date Received: 8/13/89

% Moisture: not dec.100.

Date Analyzed: 8/22/89

Column: (pack/cap) PACK

Dilution Factor:

1.00

Number TICs found: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1 UN	NKNOWN AROMATIC	29.05	60.	J
3				
7:				
8. 9. 10.				
12:				
13. 14. 15.				
16				
19.				
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29				
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FORM I VOA-TIC

1/87 Rev.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

TIOA 4105 NE Seward EPA SAMPLE NO.

GH312

Contract: 68W80051 ab Name: RECMD

ab Code: RECMD

Case No.: 12580 SAS No.: SDG No.: GH312

atrix: (soil/water) WATER

Lab Sample ID: AW0710

ample wt/vol: 5. (g/mL) ML

Lab File ID: C8311

Date Received: 8/18/89

Moisture: not dec.100.

evel: (low/med) LOW

Date Analyzed: 8/22/89

olumn: (pack/cap) PACK

Dilution Factor:

1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L

Company of the

74-87-3	Chloromethane	10.	U	J= estimate
	Bromomethane	10.	U	Value
	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	B= proces
75-09-2	Methylene Chloride	19.	В	lac
		10.	U	Col tall in
75-15-0	Acetone Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1.1-Dichloroethane	5.	ט	ļ
540-59-0	1,2-Dichloroethene (total)	5.	ט	ļ
		5.	U	ĺ
107-06-2	Chloroform 1,2-Dichloroethane	5.	U	ł
	2 7	10.	שׁ	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	İ
108-05-4	Vinvl Acetate	10.	U	}
75-27-4	Bromodichloromethane	5.	ט	1
78-87-5	1,2-Dichloropropane	5.	U	
L0061-01-5	cis-1,3-Dichloropropene	5.	U	1
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	ַ	
79-00-5	1,1,2-Trichloroethane	5.	ט	į
71-43-2	Benzene	5.	ט	
10061-02-6	trans-1,3-Dichloropropene	5.	υ	
	Bromoform	5.	ט	
	4-Methyl-2-Pentanone	10.	ט	
	2-Hexanone_	10.	U	
127-18-4	Tetrachloroethene	5.	υ	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	ł
108-88-3	Toluene	5.	שׁן	
108-90-7	Chlorobenzene	5.	U]
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	שׁ	1
1330-20-7	Xylene (total)	5.	ไซ	

3843 NE Seward EPA SAMPLE NO.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

GH311

Lab Name: RECMD

Contract: 68W80051

Lab Code: RECMD

Case No.: 12580 SAS No.: SDG No.: GH298

Matrix: (soil/water) WATER

Lab Sample ID: AW0709

Sample wt/vol: 5. (g/mL) ML

Lab File ID: A8256

Level: (low/med) LOW

Date Received: 8/18/89

% Moisture: not dec.100.

Date Analyzed: 8/23/89

Column: (pack/cap) PACK

Dilution Factor:

1.00

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

0

	Chloromethane	10.	U	J = cstna
	Bromomethane	10.	U	Value
75-01-4	Vinyl Chloride	10.	U	_
	Chloroethane	10.	ט	B+ proces
75-09-2	Methylene Chloride	3.	BJ	Cortan
67-64-1	Acetone	10.	ט (
75-15-0	Carbon Disulfide	5.	U	
	1,1-Dichlorcethene	5.	U	
	1,1-Dichloroethane	5.	ט	
	1,2-Dichloroethene (total)	5.	U	
	Chloroform	5.	U	
	1,2-Dichlorcethane	5.	U	
	2-Butanone	10.	ַ ע	
	1,1,1-Trichlorcethane	5.	[ט	
	Carbon Tetrachloride	5.	שׁ	
	Vinyl Acetate	10.	שׁ	
75-27-4	Bromcdichloromethane	5.	ע	
	1,2-Dichloropropane	5.	ַן	
	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	_/ 1.	J	
	Dibromochloromethane	·5.	U	
	1,1,2-Trichloroethane	5.	ע	
	Benzene	5.	U	,
10061-02-6	trans-1,3-Dichloropropene	5.	U	}
75-25-2	Bromoform	5.	ט	1
108-10-1	4-Methyl-2-Pentanone	10.	U	-
591-78-6 	2-Hexanone	10.	U	Ì
127-18-4	Tetrachloroethene	5.	ប	İ
	1,1,2,2-Tetrachloroethane	5.	ש]·
	Toluene	5.	ט	
108-90-7	Chlorobenzene	5.	Įυ	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
1330-20-7	Xylene (total)	5.	ט	



Preliminary Assessment

Croco Road Site

Topeka, Kansas Shawnee County

KSD984967547

\$EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT

L IDENTIFICATION
01 STATE 02 SITE NUMBER
KS D984967547

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

	AZARDOUS CONDITIONS AND INCIDENTS		
II. HAZARDOUS CONDITIONS AND INCIDENTS			
01 IX A. GROUNDWATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: 9,489	02 G OBSERVED (DATE	CI POTENTIAL	C ALLEGED
VOCs have been detected in the ground			roethylene
have been detected at levels in exces	s of safe drinking water sta	ndards.	
01 G B. SURFACE WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED:	02 G OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	D POTENTIAL	C ALLEGED
None known			
01 © C. CONTAMINATION OF AIR 03 POPULATION POTENTIALLY AFFECTED:	02 © OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	POTENTIAL	C ALLEGED
•			
None known			
01 C D. FIRE/EXPLOSIVE CONDITIONS 03 POPULATION POTENTIALLY AFFECTED:	02 3 OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	C POTENTIAL	ALLEGED
	OF INFINITE DESCRIPTION		
None			
01 OF E. DIRECT CONTACT	02 X OBSERVED (DATE01/87)	C POTENTIAL	C ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 9,489	04 NARRATIVE DESCRIPTION		
	1	t -1' -	
Consumption of contaminated wate	r may cause long-term nealth	risks.	
01 T. CONTAMINATION OF SOIL	A2 C OPPERATE OATE	. 5.005004	~ 41.5050
03 AREA POTENTIALLY AFFECTED:	02 D OBSERVED (DATE:) 04 NARRATIVE DESCRIPTION	· D POTENTIAL	CALLEGED
None known			
None known			
01 DG. DRINKING WATER CONTAMINATION 9,489	02 (XOBSERVED (DATE: 01/87)	POTENTIAL	C ALLEGED
Groundwater is used as a drinking	ng water source in the area.		
	-		
01 TH. WORKER EXPOSURE/INJURY	02 OBSERVED (DATE:)	D POTENTIAL	C ALLEGED
03 WORKERS POTENTIALLY AFFECTED:	04 NARRATIVE DESCRIPTION		
None known			
01 20 I. POPULATION EXPOSURE/INJURY 0 4.90	02 C OBSERVED (DATE:)	D POTENTIAL	D ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 9,489	04 NARRATIVE DESCRIPTION	LI FUISHIAL	L ALLEGED
Consumption of contaminated water	er may cause long-term health	risks.	
· · · · · · · · · · · · · · · · · · ·	,		

\$EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT

L IDENTIFICATION

101 STATE 02 SITE NUMBER

KS D984967547

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

PART 3 - DESCRIPTION OF HA	AZARDOUS CONDITIONS AND INCIDENT	5	704707547
IL HAZARDOUS CONDITIONS AND INCIDENTS (Commune)			
01 Z J. DAMAGE TO FLORA 04 NARRATIVE DESCRIPTION	02 TO OBSERVED (DATE:10/25/89)	POTENTIAL	□ ALLEGED
Areas of distressed vegetation have	been observed at a chemical	repackaging	facility
(Challenger Products, Inc.) located	near the site.		
01 [] K. DAMAGE TO FAUNA 04 NARRATIVE DESCRIPTION (include numbers) of specied)	02 OBSERVED (DATE:)	D POTENTIAL	□ ALLEGED
None observed			
01 ☐ L CONTAMINATION OF FOOD CHAIN 04 NARRATIVE DESCRIPTION	02 🗆 OBSERVED (DATE:)	D POTENTIAL	☐ ALLEGED
None known			
01 CM. UNSTABLE CONTAINMENT OF WASTES (Software/Islanding gouds/learning drums)	02 [XOBSERVED (DATE: 10/25/89) 04 NARRATIVE DESCRIPTION	☐ POTENTIAL	C ALLEGED
A leaking drum of unknown substance	was observed at a chemical	repackaging o	ompany
located near the site; however, no from the area around the drum.			
01 (1) N. DAMAGE TO OFFSITE PROPERTY 04 NARRATIVE DESCRIPTION	02 OBSERVED (DATE:)	POTENTIAL	□ ALLEGED
None			
01 TO. CONTAMINATION OF SEWERS, STORM DRAINS, WWTP 04 NARRATIVE DESCRIPTION	3 02 © OBSERVED (DATE:)	D POTENTIAL	☐ ALLEGED
None known			
01 式P. ILLEGAL/UNAUTHORIZED DUMPING 04 NARRATIVE DESCRIPTION Evidence of illeg	oz CXOBSERVED (DATE: 4/23/87) al dumping of oil at a nearl		C ALLEGED demolition
landfill (Champney Landfill).		•	
			
05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLI			[
Numerous permitted and unpermitted	landfills are located in the	e vicinity of	the site.
IIL TOTAL POPULATION POTENTIALLY AFFECTED: 9	489	······································	
IV. COMMENTS			
V. SOURCES OF INFORMATION (Cro specific references, e.g., state from	L sample graphed, people)		
KDHE — Bureau of Environmental	Remediation		



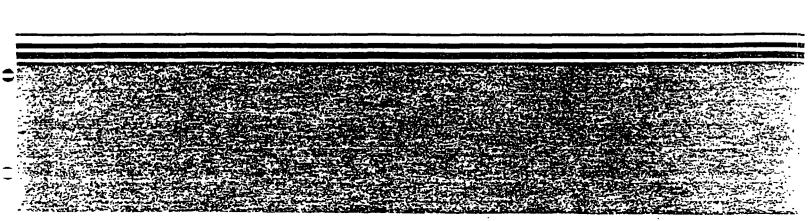
Potential Hazardous Waste Site

Site Inspection Report

Croco Road Site

Topeka, Kansas Shawnee County

KSD984967547





Site Inspection Report

SEPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

I. IDENTIFICATION
OI STATE 02 SITE NUMBER
KSD984967547

PART 1 - SITE	LOCATION AND I	NSPECTION INFO	RMATION EKSI	198496/54/	
II. SITE NAME AND LOCATION					
O1 SITE NAME (Legal, common, or descriptive name of site)	[0	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER			
Croco Road Site		Croco Road	and Souard Avenue	<u> </u>	
03 CITY		4 STATE 05 ZIP CODE	and Seward Avenue	07COUNTY 08 CONG CODE DIST	
Topeka		Ks	Shawnee	COOE DIST	
09 COORDINATES	10 TYPE OF OWNERSHIP				
390 LATITUDE 950 36' 39"	F. OTHER	B. FEDERAL	C. STATE D. COUNTY		
III. INSPECTION INFORMATION					
01 DATE OF INSPECTION 02 SITE STATUS	03 YEARS OF OPERATIO	ж			
08, 10, 89 GACTIVE INACTIVE	BEGINA	NING YEAR ENDING	UNKNOWN		
04 AGENCY PERFORMING INSPECTION (Check as that appry)	BEGIN	ANG TEXA ENDING	TEAN		
□ A, EPA □ B, EPA CONTRACTOR		C. MUNICIPAL	D. MUNICIPAL CONTRACTOR		
KI E STATE D E STATE CONTRACTOR	lame of firm) teme of firm)	G. OTHER	(Specify)	(Name of Irm)	
05 CHIEF INSPECTOR	06 TITLE		07 ORGANIZATION	08 TELEPHONE NO	
Lisa Larsen	Environmen	tal Geologis		913) 296-166	
09 OTHER INSPECTORS		 	11 ORGANIZATION	12 TELEPHONE NO.	
Danny Cooper	LIIVII	onmental	KDHE/BER	913) 296-1674	
		hnician III onmental		<u> </u>	
Shannon Huffman	ľ	hnician II	KDHE/BER	913,296-1674	
7.		onmental		 	
John Cregan		hnician IV	KDHE/BER	913) 296-1682	
				913 230-1002	
				()	
				 ```	
				()	
13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15ADDRESS		16 TELEPHONE NO	
	Champney La	andfill 3224	Seward, Topeka	(913 234-4869	
George Champney				 	
Jim Ewart		neen Atchison	n-Topeka & Santa I	Fel. (913) 357-2841	
OTH EWAIL	-Envion.	Kaliroa	d-P.O.Box 1738-Top	oeka '	
Nancy Zin	Office Mana	3500NF	ger Products Inc., Seward AveTopeka	(dhem50234-0492	
			ircraft Repair	1	
Cman Hank			Airport	(913) 357-7751	
Greg Hoefer	Owner		 	713 331-1131	
Steve Boyles			er Beechcraft	(913) 235-6256	
oceve Boyles		Billard	Airport	1713. 233 0230	
	1			()	
				<u></u>	
			4		
17 ACCESS GAINED BY 18 TIME OF INSPECTION	19 WEATHER CONDIT	TONS			
(Check one) D PERMISSION 8:00 AM					
WARRANT 8:00 AM	warm, su	nny, calm			
IV. INFORMATION AVAILABLE FROM					
01 CONTACT	02 OF (Agency/Organiza	mon)		03 TELEPHONE NO.	
Lisa Larsen	KDHE/BER	-		913 1296-1666	
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE	
Lisa Larsen	KDHE	BER	(913)296-1666	11,15,89	
	1	<u> </u>	(7137270=1000	MONTH DAY YEAR	

SEPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

KS ID98 496 7 547

ACI	A		PART 2 - WASTE INFORMATION			16/54/		
II. WASTES	TATES, QUANTITIES, AN	ID CHARACTERI	STICS					
	TATES (Check at that apply)	02 WASTE QUANTI	ITY AT SITE	03 WASTE CHARACT	ERISTICS (Check of that ap	npiy)		
☐ A SOLID ☐ 8 POWDE ☐ C. SLUDGE		TONS _	if waste dwantified independant)	☐ A. TOXIC☐ B. CORRO☐ C. RADIOA☐ D. PERSIS	SIVE G F INFECT	☐ E SOLUBLE ☐ I, HIGHLY VOLATILE ☐ F INFECTIOUS ☐ J EXPLOSIVE ☐ G FLAMMABLE ☐ K. REACTIVE ☐ H. KONITABLE ☐ L. INCOMPATIBLE		
C D. OTHER	(Specify)	NO. OF DRUMS _		LI U TENGIO	ITENT :: H. KGNITABLE :: L. INCOMPATIBLE :: M NOT APPLICABLE			
III. WASTE T	YPE	<u> </u>						
CATEGORY	SUBSTANCE N	IAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS			
SLU	SLUDGE		 	 				
OLW	OILY WASTE							
SOL	SOLVENTS		Unknown	<u> </u>	 			
PSD	PESTICIDES							
occ	OTHER ORGANIC CH	HEMICALS		<u> </u>	 			
IOC	INORGANIC CHEMIC	ALS						
ACD	ACIDS				1			
BAS	BASES							
MES	HEAVY METALS							
IV. HAZARD	OUS SUBSTANCES (See AC	Spendu for most frequentl	ly cred CAS Numbers)					
01 CATEGORY	02 SUBSTANCE N		03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD		05 CONCENTRATION	06 MEASURE CF CONCENTRATION	
SOL	Trichloroethylene		79-01-6	In groundwater		31.6	ug/1	
SOL	Tetrachloroeth		127-18-4	In groundw	ater	12.8	ug/1	
SOL	Trans and/or of dichlo	<u>ôrôethýlen</u>	e 156-60-5	In groundwater		1.0	ug/1	
SOL	Trichlorometha		67663	In groundwater		7.3	ug/l	
SOL	1,2-Dichloroet		107-06-2	In groundwater			ug/1	
SOL	1,1,1-Trichlo		71–55–6	In groundwater			ug/l	
SOL	1,2 and/or 1,4	4-Dichloro	95-30-1	In groundw	vater	2.0	ug/l	
		······································	106-46-7	<u> </u>		<u> </u>		
SOL	Acetone		67-64-1	In groundwater		21.0	ug/1	
SOL	Disulfide dime	ethyl		In groundw	vater	60.0	ug/l	
							<u> </u>	
			<u> </u>	↓		ļ	<u> </u>	
			<u> </u>	<u> </u>			 	
						L	↓	
			<u> </u>				<u> </u>	
	OCKS (See Appendix for CAS Numb							
CATEGORY	01 FEEDSTOC	K NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTO	XK NAME	02 CAS NUMBER	
FDS				FDS				
FDS			 	FDS				
FDS			 	FDS				
FDS			<u> </u>	FDS	<u> </u>			
VI. SOURCES	S OF INFORMATION (CA)	specific references e.g.,	state Mes, zample analysis,	reports)				
KDH:	E - Bureau of I	Environmen	tal Remedia	ition, files	. .			

≎EPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT AT 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

L IDENTIFICATION

01 STATE 02 SITE NUMBER

KS D98/9675/7

PART 3 - DESCRIPTION OF H.	AZARDOUS CONDITIONS AND INCIDEN	TS <u>KS D984</u>	4967547
II. HAZARDOUS CONDITIONS AND INCIDENTS			
01 CXA. GROUNDWATER CONTAMINATION 9,489 03 POPULATION POTENTIALLY AFFECTED. 9,489 VOCs have been detected in the grou			
have been detected at levels in exc			
01 C B. SURFACE WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: None known	02 □ OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	G POTENTIAL	□ ALLEGED
01 C. CONTAMINATION OF AIR 03 POPULATION POTENTIALLY AFFECTED: None	02 G OBSERVED (DATE:) 04 NARRATIVE DESCRIPTION	□ POTENTIAL	C) ALLEGED
01 CT D. FIRE/EXPLOSIVE CONDITIONS 03 POPULATION POTENTIALLY AFFECTED:	02 3 OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	☐ POTENTIAL	C ALLEGED
None			
01 & E. DIRECT CONTACT 03 POPULATION POTENTIALLY AFFECTED: Consumption of contaminated was	02 XOBSERVED (DATE. 01/8/) 04 NARRATIVE DESCRIPTION ater may cause long term he	© POTENTIAL alth risks.	
01 L'F CONTAMINATION OF SOIL 03 AREA POTENTIALLY AFFECTED: (Acres) None known	02 C 'OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	[] POTENTIAL	C) ALLEGED
01 & G. DRINKING WATER CONTAMINATION 9,489 03 POPULATION POTENTIALLY AFFECTED: 9,489 Groundwater is used as a source of	02 (XOBSERVED (DATE:01/87) 04 NARRATIVE DESCRIPTION drinking water by some of t	☐ POTENTIAL the people in	CI ALLEGED the area.
01 H. WORKER EXPOSURE/INJURY 03 WORKERS POTENTIALLY AFFECTED: None known	02 OBSERVED (DATE:) 04 NARRATIVE DESCRIPTION	D POTENTIAL	C) ALLEGED
01 XI I. POPULATION EXPOSURE/INJURY 03 POPULATION POTENTIALLY AFFECTED: 9,489		[] POTENTIAL.	☐ ALLEGED
Consumption of contaminated water ma	ay cause long term health r	isks.	

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POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
KS D984967547

PARTS DESCRIPTION OF TIAZAR	RDOUS CONDITIONS AND INCIDENTS	
II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)		
01 D. DAMAGE TO FLORA 02 04 NARRATIVE DESCRIPTION Areas of distressed vegetation have be located near the site.	,	□ POTENTIAL □ ALLEGED repackaging facility
01 G K. DAMAGE TO FAUNA 02 04 NARRATIVE DESCRIPTION (Include name(2) of agecies) None observed	OBSERVED (DATE:)	□ POTENTIAL □ ALLEGED
	CORCEDIED (DATE.	G POTEMBA G AUTOTO
04 NARRATIVE DESCRIPTION None known	G OBSERVED (DATE:)	□ POTENTIAL □ ALLEGED
(Spus Aunoli Standing equids, Lesting grams) 9,489 Q3 POPULATION POTENTIALLY AFFECTED: 9,489 A leaking drum of unknown substance wa	NARRATIVE DESCRIPTION s observed at a chemical	□ POTENTIAL □ ALLEGED repackaging company
in the area; however, no contamination the area around the drum.	was detected in soil samp	oles collected from
01 □ N. DAMAGE TO OFFSITE PROPERTY 02 04 NARRATIVE DESCRIPTION	□ OBSERVED (DATE)	☐ POTENTIAL ☐ ALLEGED
None		
01 © 0 CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 04 NARRATIVE DESCRIPTION	C OBSERVED (DATE:)	□ POTENTIAL □ ALLEGED
None known		
01 & PILLEGAL/UNAUTHORIZED DUMPING 02 04 NARRATIVE DESCRIPTION Evidence of illegal/u exists. Allegations of illegal/unauth PRPs exist.	nauthorized dumping of oil	
05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED	UAZADOS	
III. TOTAL POPULATION POTENTIALLY AFFECTED: 9,48	9	
IV. COMMENTS		
V. SOURCES OF INFORMATION (Cite specific references, e.g., state tres, sample	a analysis, reports:	
KDHE — Bureau of Environmental Re	emediation	

I. IDENTIFICATION **POTENTIAL HAZARDOUS WASTE SITE SEPA** 01 STATE 02 SITE NUMBER SITE INSPECTION KS D984967547 PART 4 - PERMIT AND DESCRIPTIVE INFORMATION II. PERMIT INFORMATION 01 TYPE OF PERMIT ISSUED 02 PERMIT NUMBER 03 DATE ISSUED 04 EXPIRATION DATE 05 COMMENTS A NPDES □B UIC C AIR D. RCRA ☐ E. RCRAINTERIM STATUS ☐ F. SPCC PLAN CXG. STATE, Specify, Landfill 453 3/9/84 Crump Landfill H. LOCAL 172 5/7/76 6/30/89 Ables Landfill 176,350 I. OTHER (Specify) Champney Landfill J. NONE III. SITE DESCRIPTION 05 OTHER O1 STORAGE/DISPOSAL (Check all that apply) 02 AMOUNT 03 UNIT OF MEASURE O4 TREATMENT (Check all that apply) □ A. SURFACE IMPOUNDMENT ☐ A. INCENERATION A. BUILDINGS ON SITE C B. PILES ☐ B. UNDERGROUND INJECTION C DRUMS, ABOVE GROUND C. CHEMICAL/PHYSICAL D. TANK, ABOVE GROUND ☐ D BIOLOGICAL ☐ E. TANK, BELOW GROUND 08 AREA OF SITE ☐ E. WASTE OIL PROCESSING C F. LANDFILL ☐ F. SOLVENT RECOVERY C G. LANDFARM ~ 147.5 (Acres) ☐ G. OTHER RECYCLING/RECOVERY H. OPEN DUMP ☐ H. OTHER ___ (Specify) ☐ 1. OTHER _ (Specify) 07 COMMENTS

The site area is predominantly residential with a few businesses located in the central portion. Several landfills, some of which are permitted by KDHE, are located in the vicinity of the site. A chemical repackaging company is located approximately onehalf mile west of the site. Northwest of the site is the municipal airport.

٧.	CO	NT.	AIN	ME	NT

O1 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE

☐ B. MODERATE

C. INADEQUATE, POOR

D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Deteriorated drums (one leaking, 10/25/89) of unknown substances have been observed on the chemical repackaging facility grounds.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: YES NO 02 COMMENTS

VI. SOURCES OF INFORMATION (Cité apecific references, e.g. state files, sample analysis, reports)

KDHE - Bureau of Environmental Remediation

_	
-	$P\Delta$

POTENTIAL HAZARDOUS WASTE SITE CITE INSPECTION DEPORT

I. IDENTIFICATION 01 STATE 02 SITE NUMBER

VEFA	PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA KS D984967547				KS D984967547
II. DRINKING WATER SUPPLY					
01 TYPE OF DRINKING SUPPLY (Check as approache)		02 STATUS			03 DISTANCE TO SITE
SURFACE	WELL	ENDANGERE	D AFFECTED	MONITORED	
COMMUNITY A. 🗆	B. 🗆	A . 🗆	В. 🗆	C . 🗆	A(mi)
NON-COMMUNITY C. □ ¹	D. 🖳	D. 🗆	E. 🔀	F. 🖸	B(mi)
III. GROUNDWATER					
01 GROUNDWATER USE IN VICINITY (Check of	one)				
É A. ONLY SOURCE FOR DRINKING	B. DRINKING (Other sources available COMMERCIAL, INC (No other water source	USTRIAL, IRRIGATION	(Limited other)	AL, INDUSTRIAL, IRRIGA nources available)	TIÓN 🗔 D. NÓT USED, UNUSEABLE
02 POPULATION SERVED BY GROUND WAT	9,489		03 DISTANCE TO NEA	REST DRINKING WATER	WELL(mi)
04 DEPTH TO GROUNDWATER	05 DIRECTION OF GRO	1	06 DEPTH TO AQUIFE	07 POTENTIAL YIEL OF AQUIFER	1
20 (n)	east-no	rtheast	<u>~ 20 (</u>	m	_(gpd)
OS DESCRIPTION OF WELLS including useage. Private wells provide in the vicinity of the private wells in the	e the only so he site and area range	ource of di three Rura from 30' to	Water Dis	er for sever tricts. The	al rural residents total depth of
□ YES COMMENTS the Kanunga Creek are or influent.			TI DISCHARGE AREA PES COMMI	ENTS	
IV. SURFACE WATER					
01 SURFACE WATER USE (Check one)					
₹ A. RESERVOIR, RECREATION DRINKING WATER SOURCE		I, ECONOMICALLY TRESOURCES	☐ C. COMMER	CIAL, INDUSTRIAL	☐ D. NOT CURRENTLY USED
02 AFFECTED/POTENTIALLY AFFECTED BO	DIES OF WATER				
NAME:				AFFECTED	DISTANCE TO SITE
Kansas river					
Shunganunga Cree	ek				5(mi)
					(mi)
V. DEMOGRAPHIC AND PROPERTY	Y INFORMATION				
01 TOTAL POPULATION WITHIN	1 1101 01111111111			02 DISTANCE TO NEAR	EST POPULATION
ONE (1) MILE OF SITE TW	(0 (2) MILES OF SITE	C. 1	MILES OF SITE		O(mi)
03 NUMBER OF BUILDINGS WITHIN TWO (2)	MILES OF SITE			REST OFF-SITE BUILDING	
03 NOMBER OF BUILDINGS WITHIN TWO (2)					. 1 (mi)
05 POPULATION WITHIN VICINITY OF SITE (F	Provide nerretive description of i	nature of population within v	icinity of site, e.g., rural, ville	ge, densely populated urban a	· · · · · · · · · · · · · · · · · · ·
The site is located	just northea	st of the '	Topeka city	limits in a	predominantly
1					al portion of the

residential area. Some small businesses are located in the central portion of the site. Agricultural land is interspersed among residences and businesses.

SFPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

I. IDENTIFICATION 01 STATE 02 SITE NUMBER KS 10984967547

VLIA	PART 5 - WATER, DEMOGRAPHI	C, AND ENVIRONMENTAL DATA
VI. ENVIRONMENTAL INFORMA		
O1 PERMEABILITY OF UNSATURATED Z		
Sand, 🗆 A. 10-6 - 10- Gravel	-8 cm/sec ☐ B. 10-4 - 10-5 cm/sec ☐	C. 10 ⁻⁴ ~ 10 ⁻³ cm/sec
02 PERMEABILITY OF BEDROCK (Creeze	one)	
Shale Saimpern	MEABLE B. RELATIVELY IMPERMEABL 10 ⁻⁶ cm/sec) (10 ⁻⁴ - 10 ⁻⁶ cm/sec)	E C. RELATIVELY PERMEABLE D. VERY PERMEABLE (Greater than 10 ⁻² cm sec)
03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
65-70(n)	(ft)	
06 NET PRECIPITATION -14 (in)	07 ONE YEAR 24 HOUR RAINFALL 2.5-3.0 (in)	08 SLOPE SITE SLOPE DIRECTION OF SITE SLOPE Cast-northeast (Slight)
09 FLOOD POTENTIAL	10	
SITE IS IN YEAR FLO	OODPLAIN	ER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY
11 DISTANCE TO WETLANDS (5 acre miner	num)	12 DISTANCE TO CRITICAL HABITAT (of endangered species)
ESTUARINE	OTHER	NA(mi)
A5 (mi)	B5(mi)	ENDANGERED SPECIES.
13 LAND USE IN VICINITY		
DISTANCE TO:	DECIDENTIAL ADEAS: MATION	HAL ISTATE DADVE
COMMERCIAL/INDUSTR	RESIDENTIAL AREAS: NATION FORESTS, OR WILDLIFE	
AO (mi)	в0	(mi) CO(mi) DO(mi)
14 DESCRIPTION OF SITE IN RELATION	TO SURROUNDING TOPOGRAPHY	
The site is location to surrounding	ated in the Kansas River topography.	floodplain with little slope in relation
	•	
		•
VII. SOURCES OF INFORMATIO	ON (Cito specific references, e.g., state lifes, sample enalyses,	reports)
KDHE - Bureau of KDHE - Drilling	f Environmental Remediati logs	lon

ŞEPA			OTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT ART 6 - SAMPLE AND FIELD INFORMATION	I. IDENTIFIC 01 STATE 02 S KS D9			
II. SAMPLES TAKE	N						
SAMPLE TYPE		01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO		03 ESTIMATED DATE RESULTS AVAILABLE		
GROUNDWATER	;	38	Analysis completed by KDHE labs				
SURFACE WATER		5					
WASTE							
AIR							
RUNOFF							
SPILL							
SOIL		9					
VEGETATION							
OTHER	e/septic	2					
III. FIELD MEASUR		KEN					
01 TYPE		02 COMMENTS			-		
Static Wate	r Level	s(swls) SW	s taken on all monitoring wells an	d some pri	ivate-wells.		
IV. PHOTOGRAPH	S AND MAPS)					
01 TYPE XI GROUN			02 IN CUSTODY OF <u>Lisa Larsen - KDHE</u> (Name of organization of individual)				
03 MAPS IXI YES □ NO	04 LOCATION		Lisa Larsen				
	ATA COLLE	CTED (Provide nerretive des	Cription)				
V. OTHER FIELD DATA COLLECTED (Provide narrative description)							
VI. SOURCES OF II	NFORMATIO	N (Cite specific references, e	g , state Nes sample analysis, reports)				
KDHE -	KDHE - Bureau of Environmental Remediation						

I. IDENTIFICATION POTENTIAL HAZARDOUS WASTE SITE O1 STATE 02 SITE NUMBER **\$EPA** SITE INSPECTION REPORT KS D984967547 PART 10 - PAST RESPONSE ACTIVITIES II PAST RESPONSE ACTIVITIES (Continued) 01 | R BARRIER WALLS CONSTRUCTED 03 AGENCY _ 02 DATE ___ 04 DESCRIPTION None 01 S. CAPPING/COVERING 04 DESCRIPTION 02 DATE 03 AGENCY_ 01 G T BULK TANKAGE REPAIRED 04 DESCRIPTION 02 DATE 03 AGENCY_ 01 U GROUT CURTAIN CONSTRUCTED 02 DATE __ 03 AGENCY_ 04 DESCRIPTION None 01 □ V BOTTOM SEALED 04 DESCRIPTION 02 DATE_ 03 AGENCY_ None 01 G W. GAS CONTROL 04 DESCRIPTION 02 DATE 03 AGENCY_ 01 C X. FIRE CONTROL 02 DATE 03 AGENCY_ 04 DESCRIPTION None 01 TY. LEACHATE TREATMENT 02 DATE 03 AGENCY_ 04 DESCRIPTION 01 C Z. AREA EVACUATED 04 DESCRIPTION 02 DATE 03 AGENCY_ None 01 1. ACCESS TO SITE RESTRICTED 03 AGENCY_ 02 DATE __

02 DATE

02 DATE _

03 AGENCY

03 AGENCY_

III, SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

KDHE - Bureau of Environmental Remediation

KDHE - Bureau of Air and Waste Management

04 DESCRIPTION
None

04 DESCRIPTION

04 DESCRIPTION

01 2. POPULATION RELOCATED

01 3. OTHER REMEDIAL ACTIVITIES



POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
KS D984967547

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION Z YES ON

02 DESCRIPTION OF FEDERAL STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

February/April 1987 - KDHE conducted RCRA inspections at facilities and landfills in vicinity of the site.

March, 1987 - KDHE instructed Champney Landfills to conduct a groundwater monitoring program for Croco Rd. Landfill (313 Croco).

April 30, 1987 - KDHE issued a health advisory for all private well users in the vicinity of the site.

April 23, 1987 KDHE directed a PRP (Challenger Products, Inc.) to discontinue June 26, 1987 - the disposal of chemicals into its septic tank and to identify January 4, 1988 the contents of all containers and drums on facility property:

May 1, 1987 - Unlawful disposal of oil at Croco Rd. landfill. Permit expired 6/30/82. Champney fined \$500 for assisting in oil dump.

III. SOURCES OF INFORMATION (Cite apocific references, e.g., state fies, sample analysis, reports)

KDHE - Bureau of Environmental Remediation

KDHE - Bureau of Air and Waste Management

\$EPA			ITE INSPE	ARDOUS WASTE SITE ECTION REPORT NER INFORMATION	ON REPORT OI STATE OZ SITE NUMBER				
II. CURRENT OWNER(S)				PARENT COMPANY (# applicable)					
01 NAME 02 D		02 D+B N	UMBER	OB NAME			09 D	+ B NUMBER	
Unknown		<u> </u>					L_,		
03 STREET ADDRESS (P O Box, RFD J. etc.)		04 S	IC CODE	10 STREET ADDRESS (P.O Boz. RFD #. etc.)				11 SIC CODE	
05 CITY	06 STATE	07 ZIP CO	OE	12 CITY		13 STATE	14 Z	IP CODE	
01 NAME		02 D+B N	UMBER	08 NAME	OS NAME			+B NUMBER	
03 STREET ADDRESS (# 0. Bas, RFO # etc.)		04 S	IC CODE	10 STREET ADDRESS (P O Bos. RFD #, etc.)			11 SIC CODE		
05 CITY	06 STATE	07 ZIP CC	DOE	12 CITY		13 STATE	14 Z	IP CODE	
O1 NAME		02 D+B N	NUMBER	08 NAME			09 0	+B NUMBER	
03 STREET ADDRESS (P O. Box. RFD # etc.)		045	IC CODE	10 STREET ADDRESS (P O. Box, RFD #, etc.)	,			11 SIC CODE	
05 CITY	06 STATE	07 ZIP CC	DDE	12 CITY		13 STATE	14 Z	IP CODE	
01 NAME	11 NAME 02			08 NAME 09			090	+ B NUMBER	
OR STREET ADDRESS (P O Box. RFD #, etc.)		04 S	IC CODE	10 STREET ADDRESS (P O Boz, RFD 0, etc.)	 -		L	1 1 SIC CODE	
05 CITY	08 STATE	07 ZIP CC	DOE	12 CITY		13 STATE	142	UP CODE	
III. PREVIOUS OWNER(S) (List most recent first)		<u> </u>		IV. REALTY OWNER(S) (# applicable:	isi masi recen	r timu)	<u>. </u>		
O1 NAME		02 D+8 N	IUMBER	01 NAME			02 0	+B NUMBER	
03 STREET ADDRESS (P O Box, RFD s, sic)		043	SIC CODE	O3 STREET ADDRESS (P O Box. RFD #. etc.)			04 SIC CODE		
05 CITY	08 STATE	07 ZIP CC	DDE	05 CITY		06 STATE	07 2	ZIP CODE	
01 NAME	•	02 D+8 N	NABER	01 NAME			021	O+B NUMBER	
03 STREET ADDRESS (P O Box. RFD # etc.)		04 5	SIC CODE	O3 STREET ADDRESS (P O Box, RFD P, etc.)		1	04 SIC CODE		
05 CITY	06 STATE	07 ZIP CC	DOE	OS CITY		06 STATE	07 2	IP CODE	
O1 NAME		02 D+B1	NUMBER	O1 NAME		<u> </u>	02 1	O+B NUMBER	
O3 STREET ADDRESS (P.O. Box. RFD #, etc.)			SIC CODE	03 STREET ADORESS (P O Box. RFD #. etc.)			<u> </u>	04 SIC CODE	
OS CITY	06 STATE	07 ZJP (CODE	05 CITY		06 STATE	07 2	LIP CODE	
V. SOURCES OF INFORMATION (CRO SDOCARE	references.	. e g., state /s	les, sample analys	a regoria)		<u> </u>	<u> </u>		
-			-						

EPA FORM 2070-13 (7-81)

≎EPA			SITE INSPE	ARDOUS WASTE SITE ECTION REPORT ATOR INFORMATION	PORT O1 STATE O2 SITE NUMB			
II. CURRENT OPERATO	OR (Provide a different from	n awner)		OPERATOR'S PARENT COMPA	NY (Happicable)	·· -·		
01 NAME	-		02 D+B NUMBER	10 NAME		11 D+B NUMBER		
03 STREET ADDRESS (P O. 8	ox, RFD #, erc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD P. exc	S (P.O Box, RFD #, etc.)			
OS CITY	· ·	06 STATE	O7 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE		
08 YEARS OF OPERATION	09 NAME OF OWNER	<u> </u>						
III. PREVIOUS OPERAT	TOR(S) (Last most recent to	rst provide onl	y d different from awner)	PREVIOUS OPERATORS' PARE	ENT COMPANIES (ADDICADIO)		
01 NAME			02 D+8 NUMBER	10 NAME		11 D+8 NUMBER		
03 STREET ADDRESS (P.O &	ox, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P O. Box. AFD #, std	(P O. Box. RFD #, atc.)			
05 CITY		08 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE		
08 YEARS OF OPERATION	09 NAME OF OWNER	DURING THIS	S PERIOO					
01 NAME			02 D+8 NUMBER	10 NAME	 	11 D+B NUMBER		
03 STREET ADDRESS (P. O. Box, RFD #, etc.)			04 SiC CODE	12 STREET ADDRESS (P O. Box RFD #, etc.	13 SIC CODE			
05 CITY		06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE		
OB YEARS OF OPERATION	09 NAME OF OWNER	DURING THE	S PERIOD			L		
01 NAME	<u> </u>		02 D+B NUMBER	10 NAME		11 D+8 NUMBER		

04 SIC CODE

08 STATE 07 ZIP CODE

12 STREET ADDRESS (P O Box, RFD P, etc.)

14 CITY

13 SIC CODE

15 STATE 16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite appecia: references, e.g., state (Res. sample analysis, reports)

09 NAME OF OWNER DURING THIS PERIOD

03 STREET ADDRESS (P O Box, RFD #, etc.)

08 YEARS OF OPERATION

05 CITY

\$EPA		SITE INSPE	ARDOUS WASTE SITE ECTION REPORT RANSPORTER INFORMATION		SITE NUMBER 984967547	
II. ON-SITE GENERATOR						
01 NAME 02		02 O+ B NUMBER				
C3 STREET ADDRESS (P O Box. RFD #, etc.)		04 SIC CODE				
05 CITY 06 STATE 07		07 ZIP CODE				
III. OFF-SITE GENERATOR(S)	!					
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER	
O3 STREET ADDRESS (P O Boa. RFD #, etc.)		04 SIC CODE	O3 STREET ADDRESS (P.O. Box. RFD +, etc.)		04 SIC CODE	
D5 CITY	O6 STATE	07 ZIP CODE	OS CITY	06 STATE	07 ZIP CODE	
D1 NAME		02 D+8 NUMBER	01 NAME	 	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE	
IV. TRANSPORTER(S)		l				
DI NAME		02 D+8 NUMBER	O1 NAME		02 D+B NUMBER	
D3 STREET ADDRESS (P.O. Bas, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P O Box. RFD #. etc.)	04 SIC CODE		
DS CITY	06 STATE	07 ZIP CODE	05 CITY	08 STATE	07 ZIP CODE	
DI NAME		02 D+B NUMBER	01 NAME		02 D+8 NUMBER	
D3 STREET ADDRESS (P O Box, RFD 6, etc.)		04 SIC CODE	03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE	
D5 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE	
V. SOURCES OF INFORMATION (CRe II)	Decific releiènces.	g , state Mes, sample analys	a, reports)			

L IDENTIFICATION **POTENTIAL HAZARDOUS WASTE SITE SEPA** 01 STATE 02 SITE NUMBER SITE INSPECTION REPORT KS D984967547 **PART 10 - PAST RESPONSE ACTIVITIES** II. PAST RESPONSE ACTIVITIES 01 A WATER SUPPLY CLOSED 04 DESCRIPTION 02 DATE ___ 03 AGENCY _ None 01 ☐ B TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION 02 DATE 03 AGENCY 01 C. PERMANENT WATER SUPPLY PROVIDED 02 DATE 03 AGENCY _ 04 DESCRIPTION 01 □ D SPILLED MATERIAL REMOVED 04 DESCRIPTION 02 DATE 03 AGENCY Not known 01 DE. CONTAMINATED SOIL REMOVED 02 DATE 03 AGENCY _ 04 DESCRIPTION Not known 01 D F WASTE REPACKAGED 02 DATE 03 AGENCY _ 04 DESCRIPTION None 01 G WASTE DISPOSED ELSEWHERE 02 DATE _ 03 AGENCY 04 DESCRIPTION Not known 01 DXH ON SITE BURIAL 04 DESCRIPTION 02 DATE Alleged illegal/unauthorized dumping of wastes by PRPs. 01 I I. IN SITU CHEMICAL TREATMENT 02 DATE __ 03 AGENCY _ 04 DESCRIPTION None 01 D J. IN SITU BIOLOGICAL TREATMENT 02 DATE _ 03 AGENCY 04 DESCRIPTION 01 [] K. IN SITU PHYSICAL TREATMENT 02 DATE ___ 03 AGENCY __ 04 DESCRIPTION None 01 . ENCAPSULATION 02 DATE 03 AGENCY 04 DESCRIPTION None 01 M. EMERGENCY WASTE TREATMENT 02 DATE 03 AGENCY _ 04 DESCRIPTION NOne 01 □ N. CUTOFF WALLS 04 DESCRIPTION 02 DATE 03 AGENCY None 01 O. EMERGENCY DIKING/SURFACE WATER DIVERSION 02 DATE 03 AGENCY 04 DESCRIPTION None 01 ☐ P CUTOFF TRENCHES/SUMP 04 DESCRIPTION 02 DATE 03 AGENCY 01 C Q. SUBSURFACE CUTOFF WALL 02 DATE _ 03 AGENCY _ 04 DESCRIPTION None

SEPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 1-SITE INFORMATION AND ASSESSMENT

	I. IDENTIFICATION							
ĺ	DI STATE	02 SITE NUMBER						
	T/C	0001067517						

PART 1 - S	ITE INFORMATION	N AND ASSESSI	MENT L	(S.D984967547
II. SITE NAME AND LOCATION				
)1 SITE NAME (Lagel, common, or descriptive name of site)			A SPECIFIC LOCATION IDENTIF	_
Croco Road Site	\ C	roco Road a	and Seward Avenu	ıe
03 CITY	04 S	TATE 05 ZIP CODE	06 COUNTY	07 COUNTY DB CONG
Topeka	K	s	Shawnee	S9 DIST
10 COORDINATES LATITUDE LONGI		3	bitawitee	
39° 04' 22". 95° 36'	1 3011			
D DIRECTIONS TO SITE (Sterage from reserve) subtle roser)	22			
Interstate 70 west to Topeka. I East on 10th Street to Croco Roa				
III. RESPONSIBLE PARTIES				
01 OWNER (# known)	02 S	STREET (Business, Making	, residential)	
Unknown				
03 CITY	04.5	TATE 05 ZIP CODE	06 TELEPHONE NUMBE	R
			()	1
2000.700	122	1		
17 OPERATOR (If income and attended from contact) Unknown	08 3	STREET (Business, making	, resources	
DE CITY	10 S	TATE 11 ZIP CODE	12 TELEPHONE NUMBE	, A
	j	1	()	
A. PRIVATE B. FEDERAL: [] F. OTHER:	(Agency name)	(C. ST/		E. MUNICIPAL
A. RCRA 3001 DATE RECEIVED:	B. UNCONTROLLED V	WASTE SITE (CERCLA	DATE RECEIVED:	NTH DAY YEAR
IV. CHARACTERIZATION OF POTENTIAL HAZARD				
TAYES DATE 8 10 , 89	A B. EPA CO CAL HEALTH OFFICIAL		X C. STATE D. O	THER CONTRACTOR
LI NO	ACTOR NAME(S):		(Seacety)	
	03 YEARS OF OPERATION			
□ A. ACTIVE □ B. INACTIVE □XC. UNKNOWN		" I	D UNK	ZNOVANI
	BEGUN	NING YEAR END	NG YEAR	
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, O	RALLEGED VOCS (tetrachlor	oethylene, trich	loroethylene,
1,2-dichloroethylene, trichloron	methane, 1,2-	-dichloroet!	hane, 1,2 and/or	: 1,4-dichlorobe
zene, acetone, and disulfide dir				ndwater. The le
of some of the VOCs exceed the	state safe dr	inking wate	er standards.	
OS DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/O Water mains from the City of Top	RPOPULATION	nto the ar	on giving the me	rionity of the
people the option to connect to	city water	However	ea giving the me arivate wells ar	re the only cour
of drinking water for some peop	re in the are	a. nealth	risks exist for	: iong-term
exposure to water contaminated v. PRIORITY ASSESSMENT	wirn excessiv	re levels o	r vous	
O1 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, and I A. HIGH [Inspection required premarity] [Inspection required]	Part 2 - Weste Mormaner © C. LOW (Inspect on time seeks)	n and Port 3 - Description of D. NC one bases)		el desposition formi
VI. INFORMATION AVAILABLE FROM				
OI CONTACT	02 OF (Agency/Organization)			Q3 TELEPHONE NUMBE
Lisa Larsen	KDHE/BER			⁽ 913 ⁾ 296–166
04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY OF	B ORGANIZATION	07 TELEPHONE NUMB	ER 08 DATE
Lisa Larsen	KDHE	BER	(913) 296-16	666 - 11/15/80

SEPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 2 - WASTE INFORMATION

		IFICATION
ĺ	01 STATE	02 SITE NUMBER
	KS	D98496754

♥EPA			PART 2 - WASTI	ASSESSMENT EINFORMATION	1 KS IJ98490 / 34 /			
II. WASTE ST	ATES, QUANTITIES, AN	D CHARACTERI	STICS					
C SLUDGE C G. GAS C D. OTHER		C A TOXIC C E SOLUBLE C I. HIGHLY VOLATILE C B CORROSIVE C F. INFECTIOUS C J EXPLOSIVE C C. RADIOACTIVE C G. FLAMMABLE C K REACTIVE						
W WACTE T	(Soecity)	NO. OF DRUMS _		L				
CATEGORY	SUBSTANCE N	AME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS			
SLU	SLUDGE		UT GROSS ALCONT	OZ UMI OF MEASONE	US COMMENTS			
OFM	OILY WASTE							
SOL	SOLVENTS		11-1	L				
PSD	PESTICIDES	·	Unknown					
occ	OTHER ORGANIC CI	HEMICALS		 				
IOC	INORGANIC CHEMIC							
ACD	ACIDS		 	 				
BAS	BASES				 			
MES	HEAVY METALS			<u> </u>				
IV. HAZARDO	OUS SUBSTANCES (See A	Spendur for most trequent	TY CREE CAS NUMBERS	I	<u> </u>			
1 CATEGORY	02 SUBSTANCE N		03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD		05 CONCENTRATION	CONCENTRATION	
SOL	Trichloroethy	Trichloroethylene		In groundwater		31.6	ue/1	
SOL	Tetrachloroet	Tetrachloroethylene		In groundwater		12.8	ug/l	
SOL	Trans and/or (is 1.2- dichloroethylene		156-60-5	In groundwater		1.0	ug/l	
SOL		Trichloromethane		In groundwater		7.3	иg/1	
SOL	1,2-Dichloroe	1,2-Dichloroethane		In groundwater			uo/1	
SOL	1,2 and/or 1. benzene	4-Dichloro	107-06-2 95-50-1,	In groundwa		2.0	ug/l	
			106-46-7			_	i –	
SOL	Acetone		67-64-1	In groundwater		21.0	ug/l	
SOL	1,1,1-1r1ch1o	roethane	71-55-6	in groundwater		1.2	ug/l	
SOL	Disulfide dim	ethyl		In groundwater		60.0	ug/1	
V. FEEDSTO	CKS (See Appendix for CAS Numb	•mi		<u> </u>			<u> </u>	
CATEGORY	01 FEEDSTOO	K NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTO	CK NAME	02 CAS NUMBER	
FDS				FDS				
FDS				FDS				
FDS				FDS				
FDS				FDS				
VI. SOURCES	S OF INFORMATION (Can	specific references, e.g.,	state has, sample analysis,	reports /				
KD	HE - Bureau of	Environme	ntal Remedia	ation, files	· ·			